THE

PALESTINE EXPLORATION FUND.

PREFACE.

THE latest news from the Survey party is satisfactory. Lieut. Conder had removed from Jerusalem to the Wilderness of Judah, whither he was to be followed by Lieutenant Kitchener, who had completely recovered from a severe attack of fever. Sergeant Black has returnedto England, and will be immediately replaced by another non-commissioned officer who has already been asked for. The reports furnished in the present number of this *Quarterly Statement* contain the Survey of Tell Jezer, a proposed identification of Bethabara (John i. 28), a paper on the Mediæval Topography of Palestine, a detailed account of Mr. Henry Maudslay's work on Mount Zion, and a report from Halhúl which should have been published in the last *Quarterly Statement.*

The illustration which appears as the frontispiece is drawn from a water-colour sketch made by the late Mr. Tyrwhitt Drake. It represents the peak, now called Kurn Surtabeh, which Lieutenant Conder proposes as that on which the "Altar of Witness" was raised (see *Quarterly Statement,* October, 1874).

With regard to their financial position the Committee ask for the sum of £3,500 before the end of the year. This will enable them to clear off their debts as well as to support the Survey expedition.

Perhaps it would be possible for other towns to follow the example of Manchester and to endeavour to raise a definite sum.

While desiring to give all publicity to the suggestions of the exploring officers of the Fund, the Committee again beg it to be distinctly understood that they leave such statements to be accepted or not, on their own merits, and that their publication here of proposed identifications, conclusion as to tribe boundaries, theories in the date of any building, and such subjects, does not imply their sanction and adoption by the Committee.

NOTES.

A meeting was held on March 11th at the Theatre of the Royal Institution, Albemarle Street, at which a paper by M. Clermont-Ganneau, on "Unknown Palestine," was read, the chair being occupied by Dr. Birch, F.R.S. The author, after enumerating some of the principal archæological results of his expedition, plunged at once into the subject of his paper, which was an attempt to prove the lineal descent of the modern fellaheen from the Canaanites by reference to their language, their manners, customs, and superstitions, and by a comparison of the two invasions of Joshua and the Caliph Omar. The paper was heard with the greatest interest. It will be published, in the first instance, in the May number of *Macmillan's Magazine.*

The forthcoming work by M. Clermont-Ganneau will be the second great published instalment of the Society's labours. It will thus be the successor to the "Recovery of Jerusalem." Full particulars will be advertised in the next *Quarterly Statement.* Meantime, those who wish to possess the work may forward their names to the Secretary. It will be issued at a reduced rate to subscribers.

Lieutenant Conder reports that he has now duplicate lists of names in Arabic as follows :—

Jerusalem sheet	. . . .	1,400 names.
Nablus ,,	. . . .	900 ,,
Jaffa ,,	. . . .	300 approximately.
Cæsarea ,,	. . . .	300 ,,

In all 2,900 names. The Jerusalem sheet was submitted to Mr. Noel Temple

Moore, H.M. Consul at Jerusalem, who very kindly went through it, finding only twenty corrections to make out of the whole, and these consisting of vulgarisms used by the fellaheen and purposely adopted by Lieut. Conder.

The Balance Sheet and Treasurer's Statement for 1874 will be found in their usual place. The Balance Sheet shows a larger expenditure on exploration than in any preceding year. The heavy debt under the head of Sundry Unpaid Accounts has already been reduced by £450.

The amount of subscriptions, donations, and proceeds from lectures and other sources paid to the central office from June 1 to March 22nd, was £1,439 14s. 5d. The balance of current account at the same date was £469 18s. 1d.

It will be a great help to the Committee if subscribers will kindly pay their subscriptions to the local secretaries or to the central office without waiting to be reminded.

The following are the Resolutions which have been passed by the Manchester Committee :—

"That this meeting warmly approves of the objects of the Palestine Exploration Fund, and pledges itself to use every exertion to raise the sum of at least £500 during the year 1875."

"That the Committee are highly gratified to learn that there is a prospect of the £500 asked for at the Manchester meeting being raised, and that it shall be devoted to the outfit and maintenance of another special man on the Survey."

"That an effort be made to raise the sum of £500 *as soon as possible.*"

Meantime up to the present date (March 20) the sum of £272 has been subscribed and forwarded to the central office. A new man has been asked for at the War Office.

Among Lieutenant Conder's reports will be found a special account of the discoveries made by Mr. Henry Maudslay, M. Inst. C.E. (whose name was erroneously spelt Maudsley in the last *Quarterly Statement*) of the rock scarp on Zion already referred to.

A part of the collections made in Palestine by Captain Warren, M. Clermont-Ganneau, and other officers of the Fund, will be sent in April to the Yorkshire Exhibition, which will be held in Leeds.

Many of the back numbers of the *Quarterly Statement* are out of print. Inquiries are constantly made as to the possibility of procuring complete sets. The Committee would be very much obliged to any subscriber who does not want his old copies if he will kindly forward them to the Secretary.

In the January *Quarterly Statement*, p. 6, the name of Dr. Thevictz is wrongly called Thevier.

Also, p. 51, *Lekiyeh* should have been placed opposite to *Giloh*: opposite to *Holon* should be *Hileh*. No identification has been as yet suggested by Lieut. Conder for *Goshen*.

THE SURVEY OF PALESTINE.

LIEUT. CLAUDE R. CONDER'S REPORTS.

XXV.

Retrospect of the Principal Results of the Survey Work in 1874.

At the close of the year which has proved the most eventful of the three which have yet passed during the Survey of Palestine, I may, I think, very well sum up the results as far as they are new and important.

The first number of the *Quarterly* contained the account of the site of Gilgal at Shejeret el Ithleh, where first Robinson (though vaguely), then Herr Zschokke, had already found the name Jiljulieh applied to certain mounds, and a ruined pool in the neighbourhood of a tree which is considered a famous and sacred site to the Bedouin. It appears that in all probability there was a convent once on the spot, and the name may be a relic, not of Jewish but of early Byzantine memories. Mr. Drake, however, pointed out that this site, the only one in the plain where any relic of the name of Gilgal has ever been found to exist, fulfilled the requisites of the Biblical and Jewish accounts better than any formerly proposed.

In February we commenced our difficult and trying work in the Jordan valley, and our first results were the exploration of 'Ain Fasail, the Phasaelis of Herod, and the discovery of the true junction of Wady Far'a, seven miles lower down than it had been ever fixed before. We also discovered a large area in which salt springs occur, possibly one of the sources of the Dead Sea salt. Up to this point also I succeeded in tracing the old geological shore line of the Dead Sea, the geological notes being throughout of the highest interest.

Our second camp was in Wady Far'a at the feet of the mysterious Kurn Surtabeh, the identification of which with the great witness altar *Ed*, one of the most interesting sites in Palestine which remained unknown, I have already suggested. The identification of the Rock Oreb, lower down the valley, was made during the December of the preceding year.

We were also able to give fresh proof of the theory proposed by Robinson, but not generally accepted, that Wady Far'a is the true site of the springs of Œnon, where St. John baptized—a site of immense interest, hitherto placed at a Sheikh Salim, of which we failed to find the

name known at a spot where the supply of water is insufficient and not as at Wady Far'a perennial. In Wady Far'a, also, the town of Archelais had been placed as marked on the Peutinger tables (A.D. 393). It had, however, been always placed at Tell Busiliyeh, where no ruins of any interest occur. We found that at the plain which lies at the base of the Kurn-Surtabeh, through which Wady Far'a flows, there are remains of a large and important site, with tombs of the Greek period, one having a much defaced Hebrew inscription, containing, however, nothing beyond a common Jewish name. This ruin, called Keráwa, is probably the site of Archelais, of which Josephus tells us that it was built by Archelaus the Ethnarch (*Ant.* xvii. 13. 1).

We passed next to Wady Maleh, where we were obliged to drink brackish water for ten days, and suffered much from the rain and oppressive atmosphere. We here took the temperature of the various springs and visited the site of Succoth ('Ain Sakút). The geological observations here were very interesting, tending to show that another lake once filled the plain of Beisan, and that a region of great volcanic activity hitherto unknown existed round Wady Maleh. This is the last salt stream, and the springs higher up the valley, as well as the Sea of Galilee, are sweet.

We continued the work to within a few miles of the Sea of Galilee, and made a large plan of Beisan, showing the hippodrome and other interesting details, as well as the line of the Roman walls. We also were able to throw much light on the defeat of Midian by Gideon, identifying the Zererath of that account with 'Ain Zahrah, and showing that the account is in accordance with the existence of the Rock Oreb near Jericho.

Marching across the country to the Maritime Plain, we completed 100 square miles and surveyed Arsúf (Apollonia), confirming Major Wilson's identification of Antipatris with the ruins of Kala'at Ras el 'Ain, and showing the improbability of any large town having stood at Kefr Saba, the ordinary identification.

The period of my absence in England was not without work. The site of Alexandrium was visited, and the great tower which there exists measured and observed; various other short expeditions, intended to check former observations, were made, and 100 square miles completed.

The autumn campaign commenced later than I could have wished, but was carried through country intensely interesting and very little known.

The principal Biblical results were—(1) The possible identification of the Choresh of Ziph (doubtfully translated wood) with the Khoreisa close to Tell Zíf, and of the wood of Hareth (probably a corruption) with the town of Kharás close to the little village of Keilah. (2) The hill of Hachilah I also proposed to find at Nebi Yekín, and the striking agreement of the site with the requisites of the Bible account of David's attack on Saul's camp were explained. (3) Still more important was the examination of Robinson's position of 'Anáb, suggesting the iden-

tification of the royal city of Debir with El Dhoheríyeh, and the "upper and lower springs" with the Seil-ed-Dilbeh, the only stream in this country which is dry and dependent on rain-water throughout. (4) The recovery of Zanoah at Kh. Sanút, which is more in accordance with the position of this town in the lists of the cities of Judah than the identification by Robinson with Kh. Zanúta. (5) From Yuttah, also, we made the interesting and valuable discovery of the possible Levitical boundary of the town of Eshtemo'a (Semú'a), a large stone called Hajr el Sakhaín existing beside the north road to the village, at the distance of 3,000 cubits, and forming the boundary of the village possessions at the present day.

In visiting Beersheba we made an important difference in the position of the wells as formerly fixed; we also saw reason to suspect that the stone-work of the well was far more modern than had been previously supposed. In surveying the line from thence to Moladah we discovered a site previously unknown, called El Meshash (the pits), with two fine wells, answering well to the position of the Scriptural Heshmon, not previously identified. We also fixed the sites of Hazar Shual and Hazar Gaddah, and found the interesting fact that these sites are walled towns of flint, answering to the meaning of Hazar or enclosure.

In conclusion, the report just sent home shows how important our work has been in the possessions of the tribe of Benjamin; and the suggested identification of Sechu, possibly fixing the sites of Ramah and Gibeah at Er Ram and Jeb'a, is one of the most valuable we have yet obtained. The exploration of the Adasa of the book of Maccabees, the explanation of the various places passed by in Saul's journey in search of the asses, the probable identification of Beth Car, giving the line of Philistine invasion in the time of Samuel, the fixing of many unknown sites in the west of Benjamin or on the border of Dan, the recovery of Luz at Khirbet Lozeh, close to Beitin, and further illustration of the grand descriptive passage in Isaiah x., are among the most valuable of these. The identification of Nob and Mizpeh with Sh'afát, and the suggestion that Tell el Fúl is one of the resting-places of the tabernacle, cannot fail to be considered of interest, and although not entirely new are given on new grounds.

In conclusion we have added the surveys of Tell Jezer and of the Zion Scarp, and brought the total amount surveyed to over 3,400 square miles.

CLAUDE R. CONDER, Lieut. R.E.

XXVI.

The Hill Country of Judah—Fifth Campaign.

On the 5th of October, we arrived at our new camp, on the highest part of the Hebron watershed, near the village of Halhúl, and just above the fine spring 'Ain el Dherweh, which an ancient though erroneous tradition points out as the site of the baptism of the Eunuch by Philip, as commemorated by a small mediæval chapel, now in ruins. On the 7th we recommenced the out-door work, and the rest of the week was spent in erecting cairns and observing from them.

The country we have now entered is a district containing a great deal of interest, but it is fairly well known already, and was carefully explored by Dr. Robinson, whose information appears throughout to be extremely exact. The number of ancient sites is unusually large, and the majority of them have been identified in a satisfactory manner. Among these may be mentioned Halhúl itself, unaltered from the name in Joshua's time; Beth Anoth (Beit 'Ainún); Jedor (Kh. Ejdúr); Adoraim, fortified by Rehoboam (Dúra); Tekoa (Teku'a); Ramah (El Rameh); Beth Tappuah (Tuffúh); and Keilah, on the borders of the low land, or Shephelah, now the village of Kíla. Immediately north lies a district which is omitted in the list of the cities of Judah in the Hebrew Bible. This omission is supplied by an insertion in the Septuagint of eleven cities, all immediately south of Jerusalem; and it is remarkable that nine out of the eleven are easily identified. The passage, however, does not appear to have been much studied, and it is possible that one or two of the identifications will be new as given below:—

Theco	Teku'a.
Ephrata, or Bethlehem	Beit Lahm.
Phagor	Beit Faghúr (Rob.) not Beit Fejjar.
Ætan	Urtás (the name remains in 'Ain 'Atán, near the pools).
Kulon	Kelónia.
Tatam	
Thobes	Soba.
Karem	'Ain Karem.
Galem	Beit Jálá.
Thether (or Baither)	Bittír.
Manocho	

All these places are sites of some importance, if not in the early, at all events in later times. The passage, if interpolated, is due to some authority having an intimate knowledge of the country, but is more natural to suppose it lost from the Hebrew lists of the fourth century.

Eshcol.—Another identification of some interest proposed by Vandevelde seems to fall to the ground on careful examination. He mentions Eshkali as the name of a fountain in the valley north-west of Hebron, but the fellahín have pronounced the name to us as Keshkali. Whether the letter Kaf, or Chaf, as here pronounced, can be supposed to have taken

the place of the aleph in the Hebrew, I leave to others to determine, but those who would place the great vine valley farther south, will not readily feel disposed to accept the identification. Hebron has, however, been always famous for its vines, and their luxuriance is very striking, as no special advantages of climate seem observable, unless it be the low sweeping cloud wreaths which come up in autumn from the sea, covering the hills, as they do also in Lebanon and on Hermon, where the cultivation of the vine is still considerable.

Bethsura.—One of the most interesting questions in this part of the land is the campaign of Antiochus Eupator against Judas Macchabæus, which I have now studied carefully on the ground. Antiochus, coming from Antioch, arrived in Idumæa and laid siege to the strong town of Bethsura (Antiq. xii. 9). The position of this town as fixed by Robinson, is as good an identification as any in Palestine. Built as a stronghold against Idumæa, and occurring under the name of Bethzur in the list of towns between Halhúl and Jedor, with the name existing unchanged almost to this day as Beit Súr, there can be no question as to its position. It is remarkable that a confusion should have been made which would make this word the name of the citadel of Maccabean Jerusalem, and refer the events here occurring to the siege of the capital, but a careful examination leads to the conclusion that such a theory is not supported by any passage in Josephus or in the Book of Maccabees. The importance of the site consists in its natural strength, in its commanding the only good line of advance upon Jerusalem from the south, and in the existence of a fine spring. The ruins are exactly opposite the camp, upon a rounded hill, the sides of which are scarped in parts. A large tower, of mediæval origin, stands ruined, and is surrounded by vaults and foundations of a late town, but large stones and a rude column or two have been used in these constructions, giving the usual indications of an older site. On the east are three rock-cut chambers, square and without loculi, and farther away on the west are two groups of similar tombs, but all are filled with earth or closed by the natives, probably containing the body of some unfortunate stranger, murdered at perhaps no distant period, for a robbery, causing the death of one victim and the maiming of two or three others, occurred on the high road not far off, scarcely more than a week ago. The spring itself is at some little distance, being on the main road, but situated so low as to be under control of the defenders. In case of a siege, they could also fall back on a well, fed apparently by a spring which exists on the north-west, in the midst of the ruins.

The town thus situated formed a formidable obstacle in the advance of Antiochus, as it had been the site also of many Maccabean successes before. Judas, leaving Jerusalem, hastened to raise the siege, and took up a position at Beth Zachariah, a distance of 70 furlongs north. Antiochus advanced at once to meet him, and the battle so graphically described by Josephus took place at "certain straits." The unwieldy elephants were made "to follow one another through the narrow passes

because they could not be set sideways by one another." The rest of the army was made to "go up the mountains," and "exposed to sight their golden and brazen shields, so that a glorious splendour was sent from them, and when they shouted the mountains echoed again." It was in this battle that the gallant Eleazer, brother of Judas, perished beneath the supposed royal elephant, but the commander, "seeing the strength of the enemy, retired to Jerusalem."

Nothing could well be more exact than this description. In many parts of Judæa it would be almost an impossibility to make use of elephants, and this, no doubt was the reason why Antiochus, though coming from Antioch, advanced on Jerusalem from the south. The road from Beit Sur to Beit Iskaria, though in places rough and rocky, has nowhere very steep gradients, and is generally open and smooth, allow-room for the march of a great force. The distance of the latter site is about seven and a half English miles from Beit Sur, the distance given by Josephus being a little over eight. It appears to me, however, that the exact site of the camp of Judas has not as yet been satisfactorily fixed.

Beit Iskaria stands on an almost isolated hill promontory, being contained on the east, west, and north, by valleys of great depth starting suddenly from the narrow watershed, whilst on the south is a narrow neck of land connecting the site with the spurs of the main chain.

The ruin stands just within this isthmus on the north, but shows few signs of antiquity. Two or three columns are observable amidst the remains of ruined houses, and in the entrance to the little mosque are two capitals of a Byzantine style, belonging to the eleventh century. There are two or three cisterns in the village, and the most ancient indication is a broad causeway, protected on one side by a station or guard-house. Drafted stones are observable in the stone fence on either side of the road, and on the main road beyond are two fallen columns and a Roman milestone.

The site thus described, and supposed by Robinson to be that of Judas' camp, is indeed, as he says, "an almost impregnable position;" but looked at from a military point of view, it would only have been available in case of attack from the north, for on that side the great depth of the valley forming the head of Wady Musúr would forbid any general to select a place where, in case of defeat, he would be driven down a steep and in places precipitous hill-side. In the two accounts by Josephus there is no indication of such a disastrous flight, but the idea of a regular retreat is conveyed, and we should look, therefore, for a site in the vicinity where, whilst defended on either flank and in front by the conformation of the ground, the Maccabean general would have his retreat in rear left open, and where, moreover, he would be supplied with water, which must always have been deficient at the village itself.

Now, immediately north-east of Beit Iskaria is a position which not only fulfils these requisites and answers to the description by Josephus, but which is also one of the finest strategical points in Southern Palestine.

A long narrow range, culminating about one mile from Beit Iskaria in the high summit of the Ras Sherefeh, is separated from the ruin by the deep valley already noticed. On this side the descent to the hills is very sudden, and lines of grim precipices and steep slopes run down more than 1,000 feet. On the opposite side (the east) the descent is almost as steep, and the ground is extremely rocky and difficult. In front, a low and narrow ridge leads towards the range, which widens sufficiently to allow of the deployment of a considerable force. The importance of the position lies in its communications. The main Hebron road runs beneath it on the east, and is here so bad from rocky ground and narrow passes, that a very small force on the flank would effectually arrest the approach of the enemy, who would be unable to turn the position, as the valleys towards the east grow even more intricate and impassable. Another fine road leading up from the south winds along the west brow of the range, and is marked by Roman milestones. Just in rear it joins the great Roman road from Beit Jibrin, and the two fall afterwards into the Hebron road near the Pools of Solomon. This point is therefore the natural defence for Jerusalem on the south, commanding three main lines of advance from the Hebron hills and from the plain. The retreat over open ground in rear is easy, and the water supply from a good spring on the hill side ('Ain el Kassís), with the great reservoirs behind, is sufficient for any number. The distance of the summit agrees even better than that of the ruin of Beit Iskaria, with the 70 furlongs from Beit Sur, whilst it is sufficiently near to be best indicated by the name of this the nearest village. In order to bring the elephants through these passes, it would have been necessary to divert them from the main road to the gentler approach leading to the hill, and no doubt the Jewish general foresaw that here, if anywhere, he could make certain of a position impregnable except in front.

Bezeth.—Another site famous in Maccabean history may perhaps be considered as now identified as follows:

Bezeth, or Bethzetho, is described as a village with a great pit. It was occupied by Bacchides, after retreating from Jerusalem (Ant. XII. x. 2), and afterwards by Judas, who was there defeated. There is no mention of the direction in which we should look for this site, but as Bacchides returns thence to Antioch, and would very probably have advanced in the same direction in which Antiochus himself had just marched on the city, we may very well look for Bezeth on the south.

I would suggest therefore the identity of Bezeth (which in the Bible Dictionary is compared with the name Beth-zait, applied in the Syriac version of the New Testament to the Mount of Olives) with the ruin of Beit Z'ata, inaccurately obtained formerly as Beit Z'áter.

The only known requisite—the large pit—may perhaps be considered as satisfied by a birket or pool of unusual magnitude from which one of the branches of Pilate's aqueduct leads. The site is without doubt ancient and very extensive. On the west is the ruined village of Kufin,

and nearer the road are crumbled stones, a broken sarcophagus, and a fine rock-cut wine-press. Farther south is a row of ancient rock-cut sepulchres, all closed by the modern villagers, and one in especial, a single chamber, is remarkable for an irregular court in front about 50 feet long by 25 feet wide, containing in its walls over 150 niches for lamps. This disposition I have never seen except here and at the tomb of Joshua. East of the road is a small tower or station, with a fine beehive cistern, and yet farther east a ruined building of considerable antiquity, though without any indication of date or origin. The site stands high on the east of Beit Ummar, and commands the road which on either side ascends to it from a valley.

Ancient Tower.—Between Beit Iskaria and Beit Z'ata is a ruin of some interest. It lies south of Beit Sawír and east of a ruin called Deshár. It is a tower about 50 feet square, composed of huge blocks of very roughly-hewn stone. These stones, cut from the rock of the natural thickness of the stratified bed, are only some 16 inches thick, whilst in length they are sometimes 8 or 9 feet, by 5 feet in breadth. No modern peasant hand piled such large blocks upon one another, and they bear throughout the marks of extreme age, and of having been exposed to the action of wind and rain for centuries. Such rude drystone monuments are amongst the oldest found in the country, and may well date back to early Jewish times. The tower in question is too large to be classed with the ancient vineyard towers, and must have been constructed for purposes of defence. It has fallen principally on the south, where many courses are piled above one another. Not far off is a square cemented cistern, also covered by one huge block of similar character, but allowing room for a man to creep in.

The Valley of Blessing.—One of the most graphic passages in Chronicles is connected with another portion of the work from this camp, and as I am able to further illustrate it by a new identification, it may be enlarged upon here. In 2 Chron. xx., we read that the children of Moab and of Ammon having come in great multitudes from "beyond the sea" to Hazazon Tamar, "which is Engedi," and having "come up by the cliff of Ziz to the end of the brook before the wilderness of Jeruel," had finally attacked the "inhabitants of Mount Seir, utterly to slay and destroy them: and when they had made an end of the inhabitants of Seir, every one helped to destroy another." Jehoshaphat meanwhile had come forth with his army "into the wilderness of Tekoa." "And when Judah came towards the watchtower in the wilderness, they looked unto the multitude, and, behold, they were dead bodies fallen to the earth, and none escaped," verse 24, "and on the fourth day they assembled themselves in the Valley of Berachah (blessing), for there they blessed the Lord." To this account Josephus (Antiq. ix. 1) adds but little. He mentions a place called "the eminence," apparently as identical with the "end of the brook," and also clearly explains that the "sea" in question is the lake Asphaltitis. To any one who has visited the country the description reads with remarkable force and exactness.

The mixed force from east and south-east of the Dead Sea had crossed round its southern end, or perhaps by the old fords of the Lisan, and camped at Engedi, the finest spring on the western shores. The cliff of Ziz is generally supposed to be a pass by which at the present day (as Dr. Robinson remarks) the Arabs ascend towards the villages in their marauding expeditions. The direct road leads towards Teku'a, and an important pass towards the village of Beit 'Ainun. No attempt has as yet been made to identify the Seir of this passage, which must not be confounded with that east of Jordan, or with the Mount Seir west of Jerusalem. In the pass just mentioned exists the village of S'aïr, hidden between the hills and surrounded with gardens; being well supplied with water, it was no doubt always a rich district, and it lies entirely unprotected from such incursions. We may, therefore, well suppose a marauding party to have come up to the village, and retreated to the desert once more on the road to Tek'ua.

The position taken by Jehoshaphat at the "watchtower of the wilderness" beyond (or, as Josephus has it, below) Tekoa, was intended to bar the approach to the capital, and was no doubt on the edge of the higher hills, whence the view extends over the long succession of rolling chalk hills which lie between Engedi and the watershed. Thence he would look down on the discomfited host, who, quarrelling no doubt over their booty, had so providentially turned their swords on one another.

The valley of Berachah is also known. The name Breikût applies to a ruin at the head of the great Wady 'Arrûb, which runs under Beit Fejjas eastward, at no great distance from Teku'a. Here, then, in a broad rich vale, well watered by copious springs, and giving space for the collection of a great multitude, the people assembled returning from the desert to rejoice in their deliverance. In the same way now, when the waters burst out from the well of Joab at Jerusalem, the whole valley is filled with the inhabitants, who, bringing down their provisions with wine or raki, sit all day long under the olive, rejoicing in the rare luxury of a flowing stream.

Pilate's Aqueduct.—In a report from Bethlehem, the late Mr. Drake gives an account of a part of this aqueduct, which we have been the first to trace to its source. He rode along it as far as the neighbourhood of Teku'a. Corporal Brophy, in whose district it lies, has now again taken it up, and traces it in the first place to the Wady el 'Arrûb just mentioned. Here we find a large birket, resembling those near Urtás (Solomon's Pools), fed originally by the springs of the valley. The aqueduct now divides into two, the longer line following the foot of the hills on the south side of the wady, and passing through another pool. The true source is found at 'Ain Kueizíb'ha, in the wady and near the ruin of the same name. The other branch comes, as before noticed, from the birket at Kufin.

The length of this extraordinary engineering work, measured along its course, cannot be less than 30 miles. The southern source is 15 Roman miles from Jerusalem in a straight line on the map. Josephus states

that Pilate brought the water a distance of 200 furlongs, or 25 Roman miles, a computation which, taking the course into consideration, is extremely moderate. The channel winds like a serpent along the contour of the hills, and succeeds occasionally in running *up* a valley without losing its level. It is carried over Wady Marâh el Ajjál on a parapet over 12 feet high. The masonry is throughout similar to that of the pools, and of the other aqueducts near them, being roughly hewn and packed with small stones, but the cement throughout is hard and well preserved.

XXVII.

The Site of Bethabara.

The site of Bethabara is of interest as the probable one of our Lord's baptism, and as such has been eagerly sought. As yet, however, no trace of the name has been recovered, and the arguments on the probable position are far from satisfactory. Bethabara is only once mentioned in the New Testament, as the place where John was baptizing soon after, and probably at the time of the commencement of Christ's ministry (John i. 28). We learn, first, that it was "beyond Jordan" (περαν του Ιορδανου); and, second, probably in the "region round about Jordan" (Matt. iii. 5); the περιχωρος which is supposed identical with the *Ciccar* of the Old Testament, a term by which Dean Stanley understands the Zor or lower valley through which the Jordan flows in the middle of the Ghor or broader depressed plain.

From the fact that "Jerusalem and all Judæa" went out to be baptized, Bethabara has been generally located in the southern part of the valley near to the traditional site of the baptism, and in explaining the topography of the flight of Midian, and the slaughter of Oreb and Zeeb, I have had occasion to point out that such a site would best fit the Bethabara of the Book of Judges—the ford held by the men of Ephraim, and generally thought to be identical with the New Testament Bethabara.

The word Bethabara ("House of the crossing over" or "Ford") is one very likely to be applicable to many points on the course of the Jordan. In the south it would have a special application, and might be considered as traditionally preserving the memory of the great "crossing over"—the passage of the Jordan by the children of Israel under Joshua. It would seem probable that the *Bethabara*, or *house* of the ford, was a small hamlet or group of houses in the immediate vicinity, and it may even be supposed that part was west, part east of the river, thus explaining the qualification of "Bethabara *beyond* Jordan." This is rendered yet more probable if the περιχωρος be properly equivalent with the Ciccar, as in this case the site of Bethabara is limited to a distance of about half a mile from the water.

Curiously enough the oldest manuscripts read Bethany instead of

Bethabara, but the reading is not admitted, nor would the Judæan Bethany be a fit place for baptism, or in any way to be described as in the region of Jordan. Bethabara is mentioned as a known place by Eusebius, but he seems evidently to refer to the modern traditional site. In the absence of more exact information, it has been generally identified with Bethnimrah, which has been fixed at the modern Nimrín. This identification rests solely on the fact that Eusebius describes Νεμρα as a large village in Katania, and called Abara.

It seems, however, to have escaped notice that there is a serious objection to placing Bethabara so far south. Our Lord descended from Galilee to Jordan, and to Galilee he returned after the baptism and temptation. In the chapter which relates the testimony of John the Baptist to Christ, and which contains the passage, "these things were done in Bethabara, beyond Jordan, where John was baptizing," we learn, in continuation (ver. 43), "the day following Jesus would go forth into Galilee," and the next chapter commences, "and on the third day there was a marriage in Cana of Galilee," at which Christ was present (John ii. 1).

It seems to me, therefore, that the search for this site should be confined to the immediate neighbourhood of Jordan, within thirty miles of the site of Cana of Galilee (the present Khirbet Kana), and it is precisely in such a position, one mile north of the mouth of Wady Jalúd, within an easy two days' journey (twenty-five miles) of Nazareth and Cana, and at one of the principal fords, that we have found the name.

The fords of Jordan, some shifting and insignificant, but others permanent and lying on principal roads, have as yet been very little known. We were careful to collect every one we could, and to verify the names and positions. It was no slight task, as our sketch of the river now shows upwards of fifty, of which eight only are to be seen on Murray's map lately published. The labour of this part of the Survey was very trying, but we should be sufficiently rewarded by this simple discovery if generally accepted.

The ford in question is called Makhádhet 'Abára, or the "Ford of the Crossing Over," for the name is derived from the Arabic root, 'Abr, having the meaning of crossing; and thus, though the second a is an *aleph*, and would not occur in the Hebrew Beth'abara, the Arabic root and the Hebrew root, and consequently the meaning of the name in both languages, is identical.

Makhádhet 'Abára is one of the principal northern fords; the great road descending Wady Jalúd on its northern side, and leading to Gilead and the south of the Hauran, passes over by it. The situation is well fitted for the site of the baptism, not only on account of its nearness to Galilee and Nazareth, but also because the river bed is here more open, the steep banks of the upper valley or ghor lesser and farther retired, thus leaving a broader space for the collection of the great crowd which had followed John the Baptist into the wilderness.

As regards the village itself, no traces seem now to exist. In the valley of Jordan there was scarcely any ruins, and those round Jericho all date seemingly in Christian times. Were the former villages similar to the miserable mud hovels of Jericho, Scythopolis, and Delhemíyeh, it would, however, be quite possible for all traces to have vanished of the hamlet here standing eighteen centuries ago. The position on a principal road would in any case make the proposed site that most probable for a hamlet, and it seems unlikely that any more important place would have been situate so near to the banks of the river.

XXVIII.

The Survey of Tell Jezer.

In accordance with the instructions of the Committee, we took the earliest opportunity of visiting Tell Jezer, to make a special survey of the country within a mile of the tell on each side, to the scale of six inches to the mile. In sending home a finished copy of this survey, as well as the photographs taken by Lieut. Kitchener, I think best to append a detailed report on the work and notes on its bearing upon the questions which make the spot specially interesting.

We started on Thursday, the 3rd of December, and reached the village of Kubab about two p.m., where we arranged a camping-ground, and then at once proceded to the work. We measured a base line on the tell, and found the position of the various stones, and made the necessary preparations for beginning the theodolite work next morning.

On Friday we started again early for a long day's work. Our base line, which was traced on a distant tree to ensure accuracy, measured 2,312 links, and had a true bearing of 73° 30′. From the east end the position of the first stone and of a cairn erected near the second, as well as that of the inscription found by Dr. Chaplin, were visible. Observations were made with a five-inch theodolite from both ends to the top of the dome of Sheikh Mohammed el Jezair, which is a point in the triangulation of the one-inch survey. A point was chosen south of the base line, and observed from both ends of the base. Observations were then made from this point to the first stone, Dr. Chaplin's inscription, and the cairn near the second stone. These lines will be calculated and the position of the stones definitely fixed.

Having finished this part of the work, we plotted the results, and commenced filling in the necessary detail. The plan of the tell itself will be reduced from a much larger compass sketch made last winter. The rest was done by the ordinary method of interpolation used on the one-inch plan, and every precaution has been taken to ensure accuracy.

The day was one of the worst we have had this autumn. A strong east wind blew in our faces during the whole course of the observations, and the dryness and peculiarly depressing absence of ozone made our task far from pleasant. Lieut. Kitchener succeeded in obtaining some

photographs under peculiarly unfavourable circumstances, and after nine hours fatiguing work we returned to camp very tired.

Saturday morning we devoted to the vicinity of the inscriptions. At the stone visited by Dr. Chaplin we made a careful measured sketch of the letters, and a rough plan of the position of the blocks. Between the first and second stones Lieut. Kitchener at once found the other inscription noticed by M. Ganneau. We took a sketch of its position on the stones, but I was aware that M. Lecompte had made a good drawing, and taken a squeeze of it; we therefore only fixed its exact position.

The Stones.—The first and most interesting question as regards Jezer is that of the position of the inscribed stones. The bearing from the second or south-eastern stone to the cairn erected for observation was 145°. From the cairn to the first or north-west stone the bearing was 323°. The first distance was 53 paces, the second 138 paces. This makes the bearing from one stone to the other as nearly as possible 152°. The variation of the compass was 4°, which gives 148° as the true bearing, being 13° off the north-west line. The stones are so near one another that this difference would make a very sensible error in the plotting of such a large area as is supposed to be represented by their direction. The reason why the bearing was obtained through an intermediate point was, that the two stones are not in sight of one another. The true east and west line from the south-east stone passes through the tell towards the south side.

It must not be supposed that these inscriptions occupy a conspicuous position; they are on a low hill-side, among rough rocks, and far from any road or track. The south-east stone is not visible from the tell, or from the first inscription. It is with difficulty that one recovers the places, even when knowing approximately where to look for them. No indication of the foundations of a *cippus* or other conspicuous monument which, as M. Ganneau pointed out, might have been thought to stand above them is traceable near to either.

The next question is that of the distance of the stones from the tell, which is now definitely settled by the theodolite observations from an accurately measured base, the only method which could with safety be adopted, owing to the hilly nature of the ground. It will be seen that they measure (85 chains) 5,600 feet from the centre of the tell, but it is impossible to give this very accurately, as there is no fixed point from which to start.

In addition to these two stones, which, as will be seen, lie at a distance of 480 feet apart, there are two other rude inscriptions in the same locality. I was under the impression at the time of our visit that a fifth was known to the villagers of Kubab. Another inscription south of those mentioned is spoken of by the fellahin of Kubab as existing still, but they profess themselves afraid to show it. I informed them that I knew of four altogether, at which they appeared surprised. At length one volunteered the information that the stone which remained

lay between the other two. This refers, of course, to the Hebrew inscription seen by M. Ganneau, which lies eight paces from the line of the boundary stones, and seventy-two paces on the line from the north-western or first stone. I send a sketch of the block upon which it occurs; the face of the stone is sloping, and a sort of rim is left above, as if to protect the inscription.

The fourth inscription, north of the two others, was noticed by Dr. Chaplin in a late visit to Jezer; it consists of only two letters. The bearing from the first stone is 310°; it is therefore not on the line.

The stone on which they are found is irregular in shape, and lies upon a second with one side seemingly cut hollow. The inscribed stone may once have stood vertically; the whole group may be natural, but bears some resemblance to a rude dolmen. Lying on the ground between the first stone and the last described, Lieut. Kitchener pointed out a broken fragment not far from the road, on which appeared to be two Roman letters. It seemed most likely a fragment of a milestone, but we did not consider it of any interest in its present condition.

The Site.—I will here briefly describe the points noticed whilst making the survey of the district. The first point of importance was the examination of the other angles corresponding to that supposed to be represented by the second or south-east stone. We determined that there was no hope of finding anything on the north or west, as both places would lie beyond the rocks and in the middle of the corn land. On the south also we found no inscription. The ruin of Sheikh Jobás lies near to the point in question, upon the summit of the hill.

The most marked feature at this site is the great number of wine-presses.* We have marked twenty-three on the plan, and it is possible that one or two may still be omitted. The finest specimen, of which I send a plan, is on the east side of the tell, at the spot where two tombs and two winepresses are marked. I have only seen one finer specimen in Palestine. The tomb is also interesting. It is of that kind which has for its opening a shaft descending from the surface of the rock, and covered usually, as at El Medyeh, by a huge block of stone. A single loculus, parallel to the length of the shaft (which measures 6 or 7 ft. by 2 or three ft., and is about 5 ft. deep), is placed on either side. I have given reasons before for considering this style of tomb early Christian. In the north of Palestine tradition makes them so. At Iksal is a large cemetery of such tombs, called the Frank cemetery. In no instance that I know has any Hebrew or pagan inscription been found on such a tomb, whereas Greek inscriptions, with crosses, have been found in more than one instance on the Mount of Olives. Such a tomb was found containing two leaden coffins, each with crosses on it. We have therefore, it seems to me, evidence of Christian work at Tell Jezer.

In a former report I have described the Tell itself (*Palestine Exploration Fund Quarterly*, April, 1874, p. 57), with its terraces of rude stone and the sort of citadel at its eastern end, as also the great cistern near

* See M. Ganneau's letter, *Quarterly Statement*, Jan., 1874.

the farm, which seems to have been at one time a chapel, the apse hollowed in the eastern wall being still visible. There are comparatively few tombs at Tell Jezer, and none in the vicinity of the inscriptions. According to the Talmud, no tombs should exist within the Levitical boundary. At Tell Jezer there are several within this area, but the same objection would hold good of the sites of Yutha and Semu'a as well as at El Dhoheríyeh, so that too much stress must not be laid upon this fact.

XXIX.

THE MURISTAN.

1st February, 1875.

LIEUT. KITCHENER and I have lately paid two interesting visits to the large site in Jerusalem known as the Muristan, and some of our remarks seem likely to be of value.

This large area is bounded by the streets known as Christian Street (the Crusading "Street of the Patriarch") on the west, David Street on the south, the small street now called Harat el Dubbaghin, and by the Crusaders, Street of the Palm-sellers, on the north, and on the east by the Bazaars (the Crusading "Street of the Latin Goldsmiths"). It measures about 170 yards east and west, and 150 north and south, and in the year 1869 it showed only ruins of a church, and a field some fifteen feet in level above the outer streets. The eastern half of the property was granted to the Prussian Government (see *Quarterly Statement*, April, 1872, p. 100), and is now completely excavated, proving still to hold the piers and walls of those noble buildings which had, it was supposed, entirely disappeared.

The site thus recovered is, however, unfortunately that of less historic importance; under the western banks of rubbish lie the remains of the most interesting of mediæval ruins—the Hospital of the Knights of St. John of Jerusalem. That which has been recovered is, however, of considerable importance as a beautiful example of the best period of Italian Gothic in the East.

The history of the site is very fully given by Count de Vogüé ("Churches of Palestine"), and a few words will suffice to explain it. The large church of Ste. Marie la Grande was erected in the north-east corner of the domain in 1130-40, and was the abbey church of a nunnery of the same name existing south of the church. This establishment was connected with the order of the Hospitallers, founded in 1099 by the monk Gerard Tunc, who held the western portion of the property. A narrow street separated the church on the east from the hospital on the west; but after the Christians under Godfrey entered Jerusalem, the importance of the order of military monks so increased, that by the time of King Amaury they obtained leave to build beyond the street bounding their property eastwards, and filled the south-eastern corner

of the parallelogram with buildings belonging to the hospital, occupying the part south of the nunnery, and thus extending over more than two-thirds of the whole area described above. These additions also date about 1140.

The original hospital is mentioned by Bernhard the Wise in 867 as the Hostel of Charlemagne; and the later Crusading works by Benjamin of Tudela in 1160-73. In 1216, Shehâb ed Din, nephew of Saladin, converted the church of the hospital (which was opposite to the Church of Calvary, and is not to be confounded with that of Ste. Marie la Grande) into a mosque, under the name Kubbet Dirkah, which is probably that now known as the Jami'a Sidna 'Omar, conspicuous for its tall minaret, dating from about the fifteenth century. We endeavoured lately to penetrate into this mosque, but only reached its courtyard by a circuitous passage, and saw no signs of ancient work. Its floor is about the level of Christian Street, and the mosque itself is kept locked.

The hospital was still standing when visited by Sir John Maundeville in 1322, and he notices 124 marble columns and 54 stone pillars built into the walls. In the seventeenth century it had become a total ruin, and subsequently it entirely disappeared, and still lies buried beneath the rubbish, which has accumulated in an inexplicable manner.

The most complete part of the ruins is the shell of the church of Ste. Marie la Grande, described by Count de Vogüé, a plan of which has been published by the Fund. The walls and the apses alone remain. The great piers are now entirely broken down, and only their bases remain *in situ*, with fragments of the tesselated pavement which once covered the whole floor. The little staircase, with its window surmounted by a double horseshoe arch, is no part of the original plan, but an Arab addition of the fifteenth century. The only points of special importance are the two doors. The principal one, on the north from the Street of the Palm-sellers, is spanned by a round arch carved with representations of the months symbolised by small figures. The southern door near the apse consists of another round arch, ornamented with a billet pattern of simple character. The same billet pattern occurs on the exterior of the north windows of the church. I would here point to the fact that semicircular arches were used by the Crusading architects as late as the middle of the twelfth century, in combination with the pointed arch, which occurs in the windows of Ste. Marie, of a peculiarly graceful shape, and which is generally found in all the Crusading churches of Palestine.

Passing through the southern door, we enter the square court surrounded with cloisters in two stories. Most of the masonry is inferior in size and character to that of the church and of the Crusading buildings hereafter to be described. It is ascribed by the Count de Vogüé to the fifteenth century as Arab work, and the arches are all pointed, badly shaped, and the vaults made of rubble, with ribs of ashlar. It is here to be remarked how far more coarsely the stones are dressed, and that

we found no masons' marks, after careful examination, on any of them. They are also more worn, having been more exposed and less carefully chosen.

The walls of the courtyard appear to be of the same date with the church, as are also the piers, with attached slender columns having capitals of various design, some unfinished occurring in the north cloister. The piers in question have a simple cornice, similar to that on the south wall and east end of the church. The south-east pier of the cloister is the same, but in the southern, eastern, and western walls the piers are of later work. The arches are throughout the same. The appearance of the Crusading cloister must have been extremely fine; the piers alternated with pillars, and from these interior arches probably sprung to the small attached semi-pillars.

The masonry of the south wall of the church is Crusading on its interior or north face, but on the south face the wall seems to have been thickened by the Arabs when rebuilding the cloister. The tooling of the stones of Crusading origin is here almost entirely diagonal, but in the more careful apse stones for the most part vertical.

Under the church wall a grave was built, from which a skull deeply dented with a long sword cut, and various small trinkets, were taken during the excavations. At the east end of the church was a solid belfry tower, and beside this, in the west wall of the court, is one of the most wonderful windows I have ever seen. Lieutenant Kitchener has photographed it, and this will give a better idea of its character than any description. It has a broad pointed arch, and a number of mouldings remarkable for their bold relief and their effective shadows. The dentellated and network patterns resemble the details of Norman work in the West; but these are not, as far as I am aware, usually found in connection with the pointed form of arch here visible, as well as in other Crusading relics.

The intelligent Abyssinian (an old overseer of Captains Wilson and Warren) who showed us over the place, took us out of the middle door on the west side of the court (see plan) to where a pier stands, between two doors leading south and west, and on the bottom of this pier on the east side he pointed out to us the following inscription :—

+ΘΗΚΙΔΙΑ
ΦΕΡΟΥCΑΜ
ΗΝΑΥΠΕΡΩΠΡΟΥ

The first two lines are of well-formed letters, perfectly distinct. In the lowest line the letters are much crowded. The last letter is evidence of the barbarous character of the inscription.

The third photograph devoted to the Muristan shows the piers which have been lately cleared out, and which belong probably to the buildings of the hospital, dating about 1140. They stand on huge walls of rougher masonry, and beneath are great reservoirs, forty to fifty feet deep, sinking down to the rock in the Tyropœon valley. These cisterns I visited

in 1872, but the notes I then made are now in England. In a former report I have mentioned the rock-cut steps at the bottom of the principal reservoir, and the manner of raising water by a huge wheel fitting in a slot between the arches of the vaults. We have as yet obtained no plan of this part of the building, but I shall endeavour to get one now that the excavations are completed.

On the west of the Prussian property some vaults are now being explored which may prove of interest. The roofs are perfect, and consist of rubble work in black mortar (full of cinders). They seem to me evidently to be the *Voltæ Concambii Hospitalis*, which opened on the narrow street between the hospital and the church. A document relative to the letting of these as storehouses bears the date 1144.

There is one point of great interest which I may here enlarge upon—namely, the masonry of the Crusading portions of the Muristan.

M. Ganneau, in a late report, *Quarterly Statement*, April, 1874, page 91, pointed out the distinctive character of mediæval dressing. In fact it is almost always easy to tell a stone of the Crusading time, for several reasons. First, the masons' mark, which neither Jewish, Roman, early Christian, nor Saracenic builders seem to have used, except in the case of the north wall of Baalbek. Second, from the stone having been well selected, its edges sharply cut, the joints fitting very closely, and the corners very squarely made. The stone is laid apparently with due regard to its quarry bed, and a hard species of mezzeh is preferred. Thirdly, from the dressing, which differs from that of the earlier styles, and is far finer than the Saracenic tooling.

In those specimens of masonry belonging to Crusading interiors, which I have studied with special regard to the tooling of the masonry, and of which the best examples are the Madeleine and Ste. Marie la Grande in Jerusalem, I find that the stones are finely dressed with a pointed instrument, in lines generally parallel, or very nearly so, and differing in interval.

Some of the lines are continuous chisel-marks, others are in detached strokes of various lengths. These are diagonal, vertical, horizontal, or, in less careful specimens, curved; and sometimes the same stone is differently dressed in various parts. All the varieties will occur in a single wall. In very many cases some parts (perhaps harder, or found to project when the tooling had been completed) are tooled with short strokes in a direction opposite to the general lines. Of these various details I have made sketches on the spot. The great blocks of the piers, which are remarkably fine specimens of masonry, are differently dressed. In these the surface of the hard stone has a mottled appearance, as though worked with a blunt point, carefully and lightly struck at right angles to the face of the stone.

In studying the masonry of the Arab additions to the Muristan, I find the Crusading tooling imitated, but the work is less patient, the strokes less regular and farther apart, the corners and edges rougher, and the appearance of the stone often very patchy. A toothed instrument is also often used.

It seems to me, therefore, that there would always be some danger of mistaking between the better specimens of Saracenic masonry and the worse of Crusading origin; and although the tooling of the stones may be at times of use in absence of other indications, its importance must be held secondary to that of the masons' marks. In general, the appearance of the stones, without a more minute inspection, will suffice to give a tolerable guess at their character; but nothing like certainty is possible unless masons' marks can be found.

These remarks only apply to the smooth-dressed masonry of interiors. The coarse hammer-dressed stones of the outer walls show neither masons' marks nor fine tooling in any Crusading building I have examined.

Of masons' marks the late Mr. Drake first pointed out to me the value. We commenced a classification, at which I am still engaged as new examples come in. We agreed in considering that they show *date* to a certain extent, but have no reference to the position of the stone in the building.

XXX.

The Rock Scarp of Zion.

Jerusalem, 10*th January*, 1875.

Having, in accordance with my instructions, made a proper survey by traverse, with five-inch theodolite, of the rock scarp of Zion, which very probably formed the south-west angle of ancient Jerusalem, I think it best, in sending home a tracing of the plan, to give a detailed account of the work.

Mr. Henry Maudslay, to whose unassisted exertions this interesting exploration is due, arrived in Jerusalem last winter with the intention of executing some work, which should be at once a benefit to the town and a labour of archæological interest. The jealousy of the Turkish Government prevented his carrying out his original intention of clearing the Birket Israil, making it fit to hold water, and at the same time carrying out an exploration of the highest interest; and his attention was diverted to the precincts of the Bishop's School on Zion, where there was room for much improvement in the comfort of the children and in the sanitary arrangements. Mr. Maudslay very ably contrived to extend his researches for stones and building materials in such a direction as would ensure valuable archæological results, and enable him to procure the ancient masonry ready cut for use. His work is now nearly complete; his trenches and clearings, extending in places 35 feet below ground, are pushed along the face of the scarp as far as (and even beyond) the property of the bishop. The school has been completed and re-opened, and Mr. Maudslay has so arranged that the old work can be easily seen throughout; thus an attraction has been added to the school premises, which will well repay the attention of visitors to Jerusalem, who, I believe, for the most part visit this school for its own sake.

It will perhaps be remembered that in an early report I gave an account of the then existing condition of this place (*Quarterly Statement*, Oct., 1872, p. 167). I pointed out that no spot near Jerusalem was so likely to give good results with tolerably easy work. I supposed that mining would not be necessary, but that trenches and short shafts, perhaps not lined, such as Mr. Maudslay has successfully sunk for some 50 feet or more, would be sufficient. Here, if anywhere, we have a solid basis, whence to commence our reconstruction of the city of Herod and of David, and if we add to this the valuable work of Captain Warren on Ophel, we only want two more points to enable us to reconstruct the first, or *old* wall of Josephus—namely, first, the northern line, which probably passes very near Dr. Chaplin's town house (as generally admitted); and, second, the point, where the Tyropœon is crossed, which, I hold, could now be found by continuing Mr. Maudslay's work to the eastward, following the scarp, and thus tracing the line of the wall along the brow of the hill.

Commencing from the west I will now describe in detail all that has been discovered.

The scarp has been traced from the corner of the north wall of the school-house for about 100 feet, and in a line directed on the south-west corner of the present city wall. The scarp is here perpendicular, and at the corner by the tower 24 feet high; it is not quite in a straight line. Mr. Maudslay's work terminates at a wall built at right angles to the scarp, and beyond this nothing is visible, a high mound of shingle covering every vestige of rock. A curious buttress of rock is observable about four feet broad and eight feet long, as shown on the plan. At this point there is a great quantity of Mosaic pavement, rather rough, with good mortar, apparently fallen from above. A rubble wall has been built on the top of the rock, but at what date it is impossible to say; I should not, however, be disposed to consider it very ancient.

Close to the school-house wall a cistern is cut in the top of the scarp, bee-hived in shape, with a square mouth. This is no doubt very ancient. The square mouth is rare in the north of Palestine, though very common round Hebron. This cistern is 12 feet deep, and is now entirely cleaned out and in good repair.

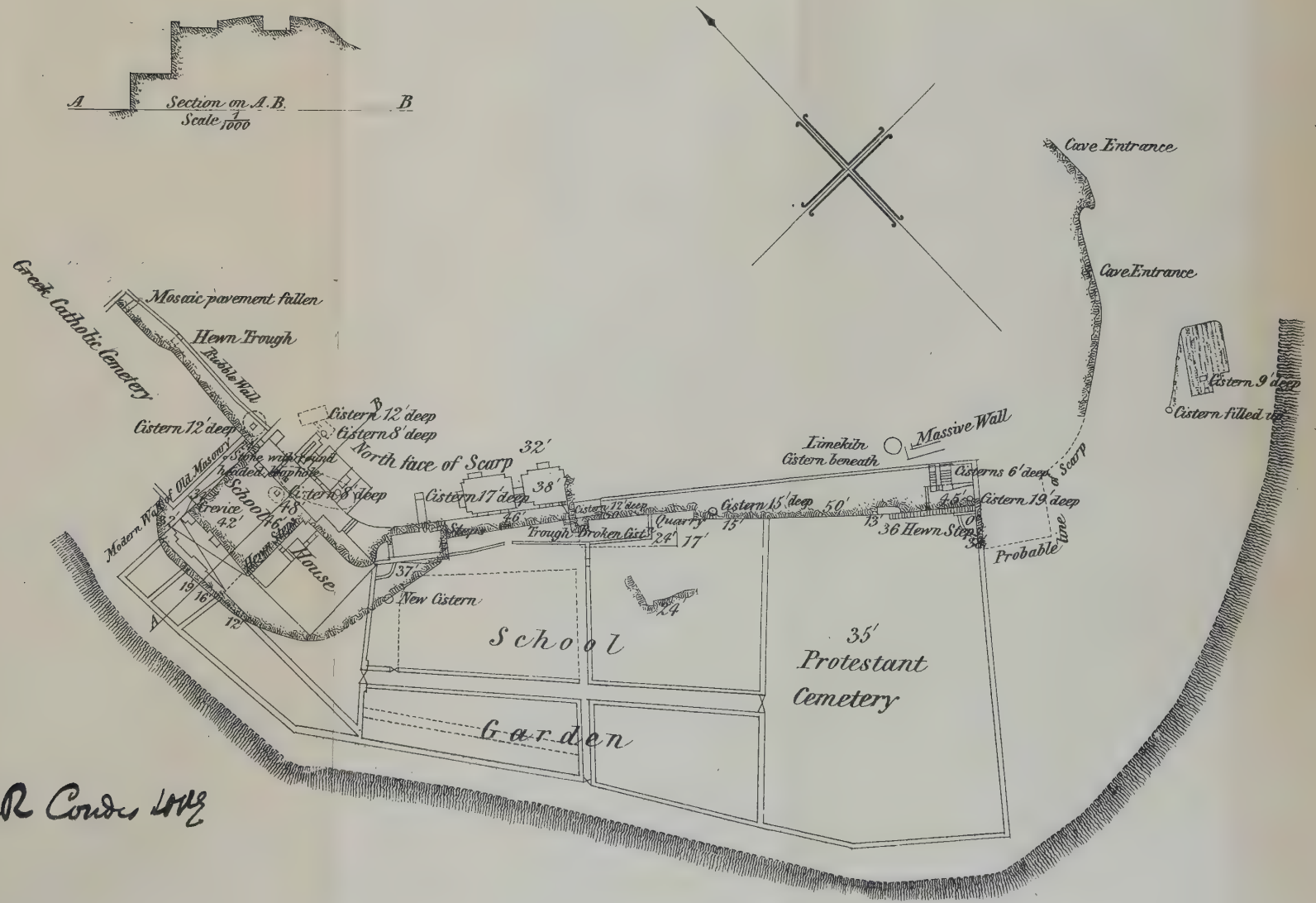
The ground in front of the scarp is here occupied as a cemetery by the Greek Catholics, and could not therefore be lowered to show the whole scarp. Mr. Maudslay has, therefore, built a wall at right angles to one scarp, leaving a narrow passage by which the rock may be reached and seen to great advantage. The wall consists entirely of fine stones from three to four feet long, having a deep marginal draft. To me, after comparing them with other work I have seen in Palestine, they appear to be Roman, though of what date it is of course difficult to say. Their size is not great, but we have no reason to suppose the masonry of the *old wall* to have been of any great size, as Josephus only speaks of the wall of Agrippa and the royal towers as containing extraordinary ashlar. The stones of which I speak were all found during the excavations, and evidently had fallen from above, most being discovered with the

ROCK SCARP OF ZION.

Scale $\frac{1}{1000}$

Heights given above lowest point of rock.

rock



Claude R Conder Lieut

drafted side downwards, as though pushed over from within. One of the stones has a curious loophole in it. Evidently the greater part was cut through the next stone below, and in this only the circular head of the loophole is visible, the draft on the stone following the circle. The loophole is about six inches diameter without and a foot or more at the back. I am particular in mentioning this wall, for one traveller has already taken it as conclusive proof that the line of the ancient wall ran in a direction at right angles to that which it actually took, and in a few years it is possible that theories may be founded on a wall built in 1874 of old material from various places. We have, therefore, been careful to note its character on the plan.

We now arrive at the first tower or buttress of rock upon the top of which the dining-room of the school-house is placed. This square foundation of rock is about 45 feet either way, and its general level is 20 feet above an outer ledge of rock which surrounds it. The ledge is, roughly speaking, 20 feet broad, and beyond another scarp appears to exist, for the shafts sunk to find the rock were continued to a depth of from 12 to 20 feet in the spots indicated on the plan by the numbers (19, 16, and 12), being the height of the rock above the zero level, which will be mentioned immediately. The section and plan will best explain how these various levels occur. The general result is that a tower projected 46 feet from the scarp at this point, having its top level with the crest of the scarp, and that it stood upon a broad ledge, also scarped, which probably had steps leading down from it, although from the impossibility of tracing the whole line, they have not been discovered. In the passage leading to the upper story of the school-house, the south face of this tower is exposed, forming one wall of the passage, and the steps which led up from the outer ledge or platform are seen in profile as they run parallel to the south face. Their width cannot be ascertained, as the school dining-room wall is built upon them, and unfortunately no record seems to have been preserved of the appearance of the rock before the school was built.

Mr. Maudslay has also made it clear that a cistern once occupied nearly all the top of the tower scarp, which in turn supplied the other cisterns cut in the main scarp from which the tower projects; of these there were four, but three have been lately blown into one by Mr. Maudslay, and extend as shown on the plan.

The cistern with an oval hole to the south of the three blown into one is of great interest, for it was found to have been entirely and purposely filled, probably at an early period, with masonry set in mortar even harder than the stone itself. The wall of the tower, as found under an archway in the bakehouse, would appear to have been of similar character.

Behind the school dining-room is a passage the floor of which is just above the rock level, and on the other side of it are offices—kitchen, bakehouse, and wood store. Here Mr. Maudslay discovered two other large cisterns, cut in rock and roofed with masonry, as shown in the plan. He

also found that the scarp has an inner as well as an outer face, and that the rock slopes away so much that when the walls of the offices, on the side farthest from the passage, were built, they had to sink eight or ten feet before reaching a foundation. Farther east, in a carpenter's shop, at a point marked 32 feet, the level of the rock sinks, at the back, to that of the outer platform of the tower.

This proves, then, that for at least a third of its length, and presumably throughout the whole extent, the great scarp is a parapet of rock presenting a vertical wall, in places forty feet high on the outside and at least fourteen feet within. This discovery has a certain bearing on the interesting question of the scarp in the Via Dolorosa, and shows that it may possibly be the interior face of a similar rock parapet upon which the wall was built, and not, as has been supposed, the *counter-scarp* of a ditch beyond the wall.

The scarp, after passing fifty feet east of the first tower, turns through an angle of some forty degrees, and runs in this direction, about 100 yards, to the outer or eastern wall of the Protestant cemetery. Immediately beyond the turn a curious detail was discovered in consequence of exploration undertaken by Mr. Maudslay at Mr. Drake's request. There is here a laundry room, the floor of which is on a rock ledge raised five feet above the level of the outer platform, on which, as has been explained, the tower stands. The north wall of the laundry is the face of the main scarp, and in this a large square trough, with a recessed arch above, resembling the loculus of a tomb of the later period in Palestine, was found behind the plaster, and a little farther west two mangers cut in the rock, similar to those planned by us in the rock-cut stables of Khirbet Dustrei (Petra Incisa) at 'Athlît. It appears, then, that a small stable, having, no doubt, an entrance from the tower platform, was here built on the very edge of the scarp, and probably outside the fortification wall. Its outer wall must have been of masonry, and it is quite possible that a small force of cavalry may here have been held in readiness for a sudden sally, more rapid and unexpected than any issuing from the body of the place could be.

Continuing our course east along the plan, we arrive next at a buttress of rock fifteen feet high and about five feet square. At its foot is a trough, rock-cut, and within at the back is another fine rock-cut cistern. The level of the scarp here rises suddenly five feet by a sheer wall, irregularly dressed, which runs in at right angles to the general direction, and forms, as shown, the east wall of a carpenter's shop. There is a good deal that points to there having been an intermediate tower at this spot, probably with a shallow ditch, the line of the counter-scarp being traceable for a short distance. As I have previously explained, two large cisterns were at one time built up against the exterior face of the scarp at this point, lined with a hard, red cement, and with outer walls of masonry. I am, however, inclined to consider these cisterns as later Saracenic work, from the character and appearance of the cement, which is extremely hard and full of pottery, resembling that used in the scarp at Cæsarea and in other places.

In the excavations at this point, whence a great number of the stones were obtained, large voussoirs, belonging to semi-circular arches, were found, with bases of pillars, some eighteen inches' diameter of shaft, and corbels as if to support a floor, roof, or projecting turret. The most interesting find was, however, the tombstone of a Crusader, with the inscription in Gothic characters, *Hic requiescit Johs de Valencinis*. It has no date.*

A little farther on there are interesting remains of a quarry, whence stones of size similar to those discovered in the débris were hewn, the process at the same time making the scarp higher and more formidable. Four of these stones remain in their places, having been cut out on every side, but requiring to be prized out beneath. A series of steps were left in the quarry, by which, as Mr. Maudslay pointed out to me, the stones could gradually be raised from the lowest bed to the very top of the scarp.

It will be seen by the plan that a portion of the scarp here projects to form an intermediate tower, twelve feet broad as measured from the scarp. It is, however, at a considerably lower level, being eight feet below the level of the platform upon which the first or great corner tower is based.

Mr. Maudslay kindly excavated this at my request, and traced the face of the projection some twelve feet. The buttress already mentioned has some connection with the structure of this tower, which, like the former, seems to have had a great cistern above its base.

The scarp continues eastwards without any remarkable details. The rock is rough and irregular at the top, but the general level is about forty feet of height. The amount of labour expended on this magnificent work can be well appreciated by any one standing at its foot, in the passage cut by Mr. Maudslay, and when some forty or fifty feet of strongly built wall stood above the rock, the result must have been a splendid and impregnable fortification which might well defy any attempt to take Jerusalem from the south.

We now reach the flight of steps first explored by Captain Warren, who at this point reached the bottom of the scarp. The natural lie of the rock according to the stratification gives a dip of perhaps five degrees towards the east, and it is therefore possible that the levels 19, 16, 12, outside the tower outer platform, already described, with the levels 17, 15, 13, at the bottom of these eastern steps, and west of them, and the zero level farther east, represent the surface of a path or ledge running along the foot of the scarp, and gradually ascending westwards; perhaps forming a narrow path from the valley, leading up to that gate called the Valley Gate, which it is supposed lay somewhere in this neighbourhood.

From the sudden rise of thirteen feet between the point where the zero level is found, and the bottom of the steps to the third tower, it

* A facsimile of this inscription has been forwarded by M. C. Ganneau.

seems probable that the steps return, and that a second flight, containing probably twelve or fourteen steps, could be found beneath the ledge which here occurs at the foot of the scarp and leading from it to the zero level.

At the top of the thirty-six steps (see "Recovery of Jerusalem," p. 280) the arch of a small cistern used to be visible. This and another also is now cleared out and holds water. They are cut in rock, with broad steps, giving six feet of water at the back of each. The first is roofed with beautiful masonry in a round or barrel vault. This work resembles exactly the arching of the reservoirs at the Convent of Zion, and those in the Haram (Nos. 1 and 3 O. Survey), which I wrote about lately. The keystone is narrow, and the width of the voussoirs gradually increases towards the haunches. The workmanship is excellent and appears to be Roman.

It will be observed at this point on the plan, that a semicircular wall is shown, and the number 0 ft. shown within; this is the zero point, or lowest level of the rock. The excavation was 35 ft. beneath the soil, and the grand scarp was here 45 ft. high. Another tower evidently existed here, to which the flight of steps led up. This is shown by the fact that the scarp runs perpendicularly to its general direction, which forms the foundation of the cemetery wall. A very little excavation would probably result in laying bare the whole tower, but the property here belongs to the Mosque of David, and special negotiations with the proprietors are requisite.

The rest of the scarp remains as when first I described it, and is of the highest interest. A broad trench here exists, and forms in all probability an approach to a gateway. Two caverns are found in the face of the scarp somewhat resembling those in the Via Dolorosa, and on the other side is a square rock platform, with a cistern 9 ft. deep, and some flat steps. The rubbish on every side is flush with the surface of the rock; but a straight line of rock is visible on the eastern side, and I am sanguine of the success which would attend excavation at this point.

I have previously noticed and sent home plans of the caverns, of which I have no copy, and as they were closed at our recent visit, the entrances only are shown on the plan.

Such being the present state of this interesting exploration, I should wish to call attention to its archæological value, and to the light which it throws on the accounts of the fortifications of Jerusalem given by Josephus and Tacitus.

Josephus thus describes the fortifications of the ancient wall of Jerusalem, and that of Agrippa especially:—

"Now the towers that were on it were twenty cubits in breadth and twenty cubits in height. They were square and solid as was the wall itself. . . . Above this solid altitude of the towers, which was twenty cubits, there were rooms of great magnificence, and over them upper rooms and cisterns to receive rain water. They were many in number, and the steps by which you ascended to them were every one

broad. Of these towers, the third wall had ninety, and the spaces between them were each 200 cubits, but in the middle wall were forty towers, and the old wall was parted into sixty; whilst the whole compass of the city was thirty-three furlongs" (B. J., v. 4, § 3).

The dimension of 200 cubits here given is evidently a mistake or corruption, as the length thus given to the wall is at least double what it could possibly have been, and even (as is the plain meaning of the sentence, if the measure refers only to the latest wall—that of Agrippa—it is still impossible; whilst, if it refers to the old wall as well, there is a manifest error, as the total circumference of the city in that case would be about sixty furlongs. If, then, we can rely upon the numbers of the towers (although a difficulty occurs in the text as to the forty of the second wall), it becomes interesting to see what the distance apart of Mr. Maudslay's three towers is, and how they tally with the generally accepted course of the old wall.

The distance between the inner sides of the two eastern towers is 162 ft. or 108 cubits of eighteen inches (the medium cubit used ordinarily in the dimensions of buildings). The distance to the east wall of the great corner tower from the east wall of the intermediate tower is 200 ft. Subtracting 40 ft., which makes the breadth of the intermediate tower come to the place where a buttress projects, and where the scarp rises, which would seem most probably the line of the western wall of this intermediate tower, we obtain 160 ft. or 106 cubits. We may say roughly, then, that the towers are 100 cubits apart, though doubtless not quite regular, and placed in suitable positions where the rock projected or the scarp was low. The result, if a line be taken from the Citadel to Wilson's Arch, and from the Ophel wall round by the contours to the cemetery and school-house, and so to the Citadel (a rough mean of the extreme lines given by different authorities), gives, by measurement of it on the Ordnance Survey, just sixty towers, the proper number for the old wall.

As regards the towers themselves, they answer well, as will be seen, to the general description of Josephus. The mean height of the scarp being thirty feet is the twenty cubits of the description. The projections of the towers seem to be about thirty cubits broad, but the building above would be set back, and thus, in all probability, twenty cubits square. The steps and cisterns belonging to each tower have been already described.

It will appear from the plan that no less than eighteen cisterns supplied the three towers with water.

It is interesting here to notice that the bases of the towers of the modern wall, at its north-east corner, are rock-cut, and similar to those just described. The foundation of the Burj Laglag is a little over twenty cubits either way; the tower south of it is close upon 200 cubits from it, and the two west of it are ninety cubits apart. This may, perhaps, when coupled with the new discoveries, point to their being on the line of the old wall also, and show that the distances were not uniform, but differed according to circumstances.

We may further inquire whether this scarp, which forms so marked a feature when exposed, was not of sufficient importance to be noticed in the very exact accounts which we possess of the fortifications of Jerusalem.

It is not to be expected that it continued on every side, for the slope of the rock and character of the ground would, in places, preclude the possibility of this, and although nothing conclusive can as yet be said on the subject, I may here note that the *Broad Wall* of Nehemiah, according to some restorations, would come close to this part of the enceinte.

Josephus, describing the course of the old wall, says :—"It began at the same place (Hippicus), and extended through a place called Bethso to the gate of the Essenes, and after that it went southward" (*facing south*, according to the best authorities, B.J.,v.4, § 2). Hence we see that the "place called Bethso," and the Gate of the Essenes, were towards the south-west corner of the city, which renders it possible that for Bethso we should read Bethsur, "the house of the scarp," and that by excavating the supposed approach to a gate, mentioned above as east of Mr. Maudslay's work, we should recover the gate of the Essenes.

I have, I think, said enough to show how valuable Mr. Maudslay's work has been, and how desirable it is to continue it from either end. The discovery of a second tower, north of the corner tower, under the school-house, would make the question of the intervals much clearer; and if a gate were found, as seems probable, it would be a valuable discovery. Eastward, also, I contend that a little further exploration might set at rest the question as to where the old wall crossed (as it undoubtedly did) the Tyropœon valley.

But the discovery that a basis of rock, and not a mere solid mass of masonry, formed the foundation of wall and tower, has an even more interesting bearing, as it shows that there is a well-grounded expectation that we may yet recover the Royal Towers, on the position of which so much depends in Jerusalem Archæology.

Tacitus (Hist. v. 11) explains—"The extreme parts of the rock were craggy, and the towers, when they had the advantage of the ground, were sixty feet high; when they were built on plain ground they were one hundred and twenty feet. . . . To those who looked at them at a great distance they appeared equal." Thus we may suppose that the three royal towers, which differed considerably in height, were built up to the same level at the top, and that the difference was in the solid base according to the dip of the ground. This is unquestionably the case with Hippicus and Phasaelus, each of which was fifty cubits high, though the totals were eighty and ninety, because the solid bases were respectively thirty and forty cubits high. (In the case of Hippicus the base was in part at least artificial.) Mariamne also, if it was seventy cubits high, had the difference made up by the higher ground on which it stood, its solid base being only twenty cubits. This is to a certain extent an indication of the position of the royal towers, and it is quite possible that the sloping scarp of David's

Tower covers the solid base of one of them (most probably Phasaelus), as it is popularly supposed to be solid within, and as we have many instances in Palestine of sloping scarps being added in the middle ages to ancient sheer walls. The shortest and surest way to solve these questions, which are amongst the most important of those connected with Jerusalem Archæology, is to follow along the line of Mr. Maudslay's excavations, which are very valuable as showing that, however the masonry may have been destroyed and lost, we may yet hope to find indications of the ancient enceinte in the rock scarps, which are imperishable.

CLAUDE R. CONDER, Lieut. R.E.

XXXI.

MEDIÆVAL TOPOGRAPHY OF PALESTINE.

29th January, 1875.

THE early Christian and Crusading sites of Palestine, furnishing as they do many of the principal ruins of the country—churches, castles, hospices, and walled towns, of an architecture far exceeding in strength and beauty the majority of earlier work, are in themselves of considerable interest; and occasionally we are able, by means of the traditions they preserve, to fix upon the true locality of a place of Scriptural importance.

The majority of such sites are well known, and recur in the accounts of the various pilgrimages, but I propose here to give an account of some of the more obscure names, which I select from a list of about 150. And, first, to consider the topography of the famous march made by the English under King Richard Lion Heart from Haifa to Jaffa. (Itin. of Rich. I., Book IV., chap. 12.)

King Richard's March.—The army having reached Cayphas, the modern Haifa, so called, we are informed, by Sir John Maundeville, A.D. 1322 (who, however, confused it with 'Athlít), because Caiphas was lord of it, encamped at the foot of Carmel, between the town and the sea; that is, on the plain near the Kishon, in all probability, as water was the first necessary; and a river, as will be seen subsequently, generally chosen. No description of the town at this period exists, and Benjamin of Tudela, who visited it thirty years before the arrival of King Richard, mentions only the Jewish tombs which, with the candlestick rudely carved upon them, still form an important feature on either side of the town. (See the specimen Map of Carmel.)

The baggage was here lightened, and the march commenced on a Wednesday, towards the end of September in the year A.D. 1191.

The first day's march was a long one, "impeded by the thickets and the tall and luxuriant herbage," proving that the amount of wood has sensibly decreased since that date, for now only occasional bushes are found, and most of the land is under cultivation, except where

the sand has encroached. Arrived at Capernaum, "which the Saracens had razed to the ground," the king rested, but the camp was fixed for the night at the house called "Of the Narrow Ways."

One would naturally expect that 'Athlít was the first stoppage, especially as it is about half way to the next camping-ground, and yet further because the old name for Khirbet Dustrey, the outlying fort of 'Athlít, is Petra Tucisa—the scarped rock—a title due to the fort itself, with its stables, being principally rock-cut, or perhaps from the rock-cut passage through the bar of rock separating the narrow plain from the sea-shore by which the main road, with the marks of wheeled vehicles (chariots or Crusading carts) still visible upon its surface, reaches the fortress of 'Athlít, or Castel Pelegrino. We have, however, an identification of this Capernaum by the venerable Rabbi Benjamin, which makes it most probably the same as Tantura.

"It is four parasangs hence" (from Cayphas), he says, "to Khephar Thancum (probably the Kefr Tanchumin of Jerome and of the Talmud), which is Capernaum identical with Meon. . . . . Six parasangs brings us to Cæsarea, the Gath of the Philistines" ("Early Travels in Palestine," p. 81). The proportional distances are about those of Tantura, which is eighteen miles from Haifa and eight from Cæsarea. The identification of Scriptural sites had got into considerable confusion at this time, but where so definite an account is given by a writer generally pretty correct, we can have little hesitation in fixing Capernaum at Tantura, where a supply of water could easily be obtained. There is no doubt that a considerable Crusading place was once standing at the ruins of El Burj, close to the modern village. A tower stands conspicuously on a little headland, once forming one corner of a square fort. The remains of a harbour and landing-place, with a colonnaded building of early Christian date, are noted in former reports. The harbour is necessary for the identification, as we find that the army "remained two days in the above-mentioned station, where there was plenty of room for their camp, and waited there until the ships arrived." The country is open and level near Tantura, and besides the rock-cut passage described above, four others were found, and are described in our notes, having guard-houses cut in the rock on either side, and completely barring communication between the shore and the interior. Two are between 'Athlít and Tantura, one opposite the latter town, and the last some little way south of it, probably the one here meant, as the principal road passes through it.

The distance thus traversed was nearly twenty miles, which in the hot September days on foot, or heavily laden with armour, must have been a march of extraordinary length, no doubt rendered necessary by the absence of water in sufficient supply for an army of about 100,000. Two days' rest were required to recover from its effects, and on a Saturday the king arrived at the River of Crocodiles, passing by a town named Merla, a march of five miles. There is no doubt that the river is the Zerka, the only river in Palestine where crocodiles now exist

according to native evidence,* but the name Merla seems probably a corruption, and may possibly apply to El Mezra'a, where a strong Crusading tower still remains in ruins beside the main road here traversed.

The route taken by King Richard is, I may observe in passing, the same which we followed in our journey from Beirút to Jaffa, but being unmolested by Saracens, and not encumbered with armour, we accomplished a distance of 44 miles in one day, where the Crusaders took in all ten days.

At the Zerka the Crusaders rested for Sunday, and on the Monday they advanced by Cæsarea, which was ruined by the Saracens, but which the chronicler admires considerably. "The circuit of the City of Cæsarea is very great (alluding, no doubt, to the Roman town), and the buildings are of wonderful workmanship." Here also the fleet communicated with the land force, and by night the camp was fixed at the Dead River, five miles from the Zerka.

It will be found that in all, five rivers are mentioned (including the Crocodile River) between Capernaum and Joppa, and as there are five streams of considerable breadth, and of perennial supply, we cannot hesitate in identifying these with the rivers of the narrative in the order in which they occur. The Dead River, therefore, is the Nahr el Mifjir, as it is generally called, although it has four other names in various parts of its course. The remains of a bridge, with 15 ft. width of causeway, here occur at a part where the river is 60 to 70 ft. broad, and by this no doubt the main part of the army crossed, though the baggage train, which, for protection, followed close to the sea-shore, would have forded this and the others, as we were obliged to do, close to the mouth.

On Tuesday, apparently another short march of five miles brought the army from the Dead River (so called, no doubt, from its sluggish character) to the Salt River, being harassed all day by the flying clouds of Turks and Bedouin. It is remarkable that one of the names of the Nahr el Mifjir, near its head in the hills, is Wady Maleh (salt), but, nevertheless, we must identify this river with the Nahr Skanderúneh, a very broad and marshy stream, which flows through the midst of "a country of most desolate character and destitute of everything." The chronicler adds: "For they were compelled to march through a mountainous country because they were unable to go by the sea-side, which was choked by the luxuriant growth of the grass."

We must, I think, understand from this that the way lay over the rolling sand hills, which extend along the coast in this part, and that the object was to avoid the difficult and intricate rushy and marshy ground which is impassable to those not well acquainted with its windings, and unfitted for the advance of a large body of men.

The next was the longest march undertaken, with the exception of the eighteen miles to Tantura, and was again necessitated by the absence of water. The army had rested by the Salt River two days, and proceeded

* Mr. MacGregor asserts that crocodiles exist in the Kishon.

on Friday through the forest of Assur, or Arsur, to the river "commonly called Rochetaillé." In this forest we recognise the long extent of park-like scenery in the neighbourhood of Mukhalid, where groups of Sindian, the ordinary oak of Palestine (*Q. Infectoria*), are dotted over the rolling plateau of red semi-consolidated sand, covered with thin grass and carpeted in spring with flowers. But very little brushwood exists, a few low bushes of the Abhar (mock orange) and other shrubs are seen in places, but the accidents of the ground would have furnished abundant cover of that kind which the Bedouin prefer, and it was accordingly here that an ambush was fully expected. The *River Rochetaillé* we at once see to be the Nahr Falik, a considerable stream, now almost dry in autumn, where the papyrus grows even more luxuriantly than in the Zerka River. The reason of the name is found in the long narrow rock channel, cut artificially at some former period through the inland cliffs, by which the river finds a channel to the sea-shore as marked on the Cæsarea sheet of our map.

The distance from the Nahr Skanderúneh is nine and a-half miles, the way being through the greater part over forest, or rather open park-like scenery.

"On the Saturday, the eve of the Nativity of the blessed Virgin Mary," the great conflict with the enemy took place. The Saracens, emboldened by the apparent impunity with which they attacked the heavy advancing columns, became so insolent that a conflict was unavoidable, and the vivid description of the great battle on the moors round Arsur, or Arsuf, occupies six long chapters of this interesting chronicle. Sunday was spent on the field in masses for the dead, and on Monday the army arrived at the River of Arsur, and immediately after passing this (evidently the Aujeh) they reached Joppa, where they "refreshed themselves with the abundance of fruits."

The account of this famous journey occurs in the Itinerary of Richard I., by Geoffry de Vinsauf, B. iv. chap. 12 to 25.

The enumeration of the castles destroyed by Saladin, which follows, is of great interest. Some such, as Mirabel (Ras el 'Ain), Ramula (Ramleh), Blanchward (Tell es Safi), and St. George (Lydda), are well known. Others, such as Galatia, Belmont, Toron, Ernuald, Beauverie, in the south, still require identification. Two others, Maen and the Castle of Plans, I propose to notice further.

After the requisite rest at Jaffa, Richard set out to rebuild Maen and Plans, and encamped (the chronicle says "after a short march") between the two. The Templars, whilst engaged on the latter, received an attack from "Bombrac," and Richard sent reinforcements to them, apparently from Maen, though whether in return for a message is not clear. I am ignorant whether these castles are mentioned in any other chronicle, but Benjamin of Tudela evidently identifies Maen, or Maon, as we have already seen, with Tantura, which, as mentioned above, was in ruins. Bombrac is, no doubt, the modern Ibn Ibrak, and this would point to *Plans* as being in an intermediate position

on the plain. I should propose, therefore, to identify the Castle of Plans with Kalensawieh, an important Crusading site, which I have described in a former report. It is a about twenty miles from Ibn Ibrak, and the same distance from Tantura. How the name came to be so elongated or contracted (as the case may be) it is not easy to imagine, but there are parallel cases in the Crusading chronicles, and orthography seems to have been a very neglected science in the 12th century. The distance seems rather long, but we see that ten miles was not an extraordinary march, and, indeed, much longer ones were frequently made in the latter part of the campaign. From the camp, at some station halfway to Tantura, the Castle of Plans would not be over this distance.

Kalensawieh stands on the edge of the woodlands of Mukhalid, not far from the foot of the hills, and is a miserable mud village, in the centre of which is a strong Crusading tower. Beside this grows the only palm which (as far as I am aware) exists between Haifa and Jaffa, and east of the tower is a hall of beautiful masonry, with vaulted stables beneath, of which a plan and description will be found in our notes.

From these notes on the identification of the eight opposite sites of *Capernaum*, the *House of Narrow Ways*, the *Salt*, *Dead*, and *Rochetaillé Rivers*, *Merla*, *Plans*, and *Maen*, I now turn to one or two interesting sites mentioned in yet earlier accounts.

The Tower of Ader. This site is first mentioned in Genesis xxxv. 21, as the residence of Jacob, and is stated in the Onomasticon to be 1,000 paces from Bethlehem. Arculphus (A.D. 700) and St. Bernard the Wise (A.D. 867) notice it, the first as "containing the monuments of the three shepherds to whom, on the spot, the angel announced the birth of our Lord," the latter as the "Monastery of the Holy Shepherds," one mile from Bethlehem.

The Mediæval site is recognisable in the Keniset el Ra'wat, a small chapel, with pillars and other traces of a larger former building, which is to be seen still in use, although the door is generally locked, on the outskirts of the Shepherd's Plain east of Bethlehem, and close to Beit Sahur el 'Atika. From the context we find that the original place of the "Tower of the Flock," as Edar is properly translated, was between Rachel's Tomb and Mamre. In Micah (iv. 8), "The Tower of the Flock" is mentioned as "the stronghold of the Daughter of Zion," seeming to connect it with Jerusalem; but the identity with the site now discussed is doubtful, and it seems to me not at all improbable that the true site of Jacob's Camp is preserved under the tradition of the Shepherd's Plain, for considering the extremely rugged and difficult character of the country round Bethlehem, there is no spot so well fitted for an encampment as is this, especially when we remember that it was occupied apparently for a considerable period.

St. Eustochium. The number of monasteries upon the plains o Jericho was very great, and yet more names are known, but not identified. Amongst these is St. Eustochium, which was placed, according to St. Willibald, "in the middle of the plain between Jericho and Jerusalem."

The only site which at all fulfils this definition is that of Tell Moghyfer (at one time identified with Gilgal), where are remains of a considerable convent of early period, fed by aqueducts which come down from Elisha's fountain.

The same writer, who was more enterprising than most of the early travellers, mentions *Thecua* as the site of the murder of many children by Herod, and a *Saint Zacharias*, which is evidently *Khirbet Beit Skaria* —the ancient Beth Zacharias. This brings back the date of the Church at Teku'a (of which only a few pillars and a magnificent octagonal font remain) to the eighth century, to which also, from the style of architecture, we should be inclined to attribute the remains of a church at Beit Skaria, now much destroyed, but showing capitals of early Byzantine character.

The Pillar of Salt. The traditional site of Lot's wife appears to have been entirely lost to modern writers. Benjamin of Tudela thus describes it:—"Two parasangs from the sea (about eight miles) stands the salt pillar into which Lot's wife was metamorphosed, and although the sheep continually lick it, the pillar grows again, and retains its original shape." It appears that the traveller did not visit it.

Sir John Maundeville (1322) speaks of the same site:—"At the right side of the Dead Sea the wife of Lot still stands in likeness of a salt stone, because she looked behind her when the cities sunk into hell."

Mandrell, in 1697, says:—"On the west side of the sea is a small promontory, near which . . . stood the monument of Lot's metamorphosed wife, part of which (if they may be credited) is visible at this day." He was not, however, tempted to visit the spot.

These descriptions seem all to refer to the same place on the west shore of the sea, and I would suggest that they refer to the unique and extraordinary crag which M. Ganneau describes on the western shore near to the Hajr el Sulah. This curious pinnacle of rock, standing out from the cliff, and rudely resembling a shrouded figure, is called by the Arabs, *Kurn Sahsûl Hemeid*, a name for which I am unable to give any interpretation. It seems well fitted for the legend attached to it, and no other monument to which it could have been applied is to be found on the north-western shores of the sea.

CLAUDE R. CONDER, Lieut. R.E.,
In Command Survey of Palestine.

NOTE ON LIEUT. CONDER'S IDENTIFICATION OF NOB.

IT seems to me that in seeking to identify Nob with Neby Samwil, Lieut. Conder has completely misunderstood the force and meaning of one of the most graphic and picturesque passages in the Bible, that of

Isaiah x. 28–32, which I give in full, as detached sentences are often misleading:—

> He comes to Ai, passes through Migron,
> At Michmash deposits his baggage;
> They cross the pass, Geba is our night station;
> Terrified is Ramah, Gibeah of Saul flees.
> Shriek with thy voice, daughter of Gallim;
> Listen, O Laish! Ah! poor Anathoth!
> Madmenah escapes, dwellers in Gebim take flight.
> Yet this day he halts at Nob:
> He shakes his hand against the mount, daughter of Sion,
> The hill of Jerusalem. (See *Dictionary of Bible*, art. Nob.)

In this passage, if it has a meaning—and I cannot suppose that it has not—the prophet describes, in such detail that it is difficult to believe he is not describing an actual event, the march of an Assyrian army upon Jerusalem; and we may be quite certain that, with his knowledge of the country, and writing as he did for those who were equally well acquainted with it, he would describe a line of march which, under certain conditions, an army would naturally follow if its special object were the capture of Jerusalem. The conditions to which I allude are the passage of the great ravine at Michmash (*Mukhmas*), and encampment for the night at Geba (*Jeba*); why this route was selected in preference to the easier road along the line of water-parting we have no means of ascertaining, and it does not affect the question.

Of the places mentioned by Isaiah, we know with a considerable degree of certainty the positions of Michmash, Geba, Ramah, Gibeah, and Anathoth; of the others nothing is known. From Geba to Nob was evidently a day's march in the progress of the army, and the order in which the villages are mentioned leads us in the direction of Jerusalem, and not of Neby Samwil. If we are to suppose that the King of Assyria went to Nob simply for the purpose of shaking his hand against Jerusalem, the lofty summit of Neby Samwil would answer admirably; but if, as I believe, the passage means that the fierce Assyrian warrior was leading an army from Geba against Jerusalem, and that his progress was suddenly arrested at Nob on the way thither, we must seek a site for Nob on the road between those two places; and I cannot imagine a more natural one than some place in the vicinity of that Scopus whence, in later years, Titus and his legions looked down upon the Holy City. Certainly no general advancing with an army from Geba against Jerusalem would lead it to Neby Samwil, a high peak four and a half miles from the city, and separated from it by an intricate country and the deep ravine of Wady Beit Hanina.

The only other passage in the Bible which gives any clue to the position of Nob, and that a very slight one, is the account of David's flight from Ramah to Gath by way of Nob; it is of course possible that David may have reached the Philistine plain by way of Gibeon (*El Jib*), but it is equally possible, and in my opinion more probable, that he took

the road passing by Jerusalem and Bethlehem, his native place, which was quite as short and convenient, if Gath were, as there are some reasons for believing, at Tell es Safieh.

The fanciful derivation of the Neby of Neby Samwil from Nob will not bear a moment's scrutiny; there is no reason why this particular Neby should be derived from Nob more than any one of the hundred other Nebys in Palestine, and the Arabic Neby is hardly an exact reproduction of the Hebrew Nob. It may also be remarked that the tradition respecting Neby Samwil is antecedent to the Moslem conquest; in the time of Procopius there was a convent of St. Samuel on the summit, and it is only a natural transition from the Christian tomb and convent of St. Samuel to the Moslem tomb of the prophet (*Neby*) Samwil.

In his attempt to identify Nob with Neby Samwil, Lieut. Conder identifies it also with the "high place" of Gibeon, the site of the tabernacle during the early part of Solomon's reign; this, however, is unsupported by any passage in the Bible, and the quotations from the Talmud given in Lieut. Conder's paper seem to me to prove conclusively that Nob and the high place of Gibeon were distinct places. It is also reasonable to suppose that after the massacre of the priests at Nob the tabernacle would be removed from the scene of so much bloodshed; we do not know when it was erected at Gibeon, but there are some grounds for supposing that it was with Saul on Mount Gilboa. Dean Stanley has proposed to identify the high place of Gibeon with Neby Samwil, but he is careful to state that there are no grounds for the supposition except the apparent suitability of the place for the magnificent ceremonial on the occasion of Solomon's visit; on the other hand, it should be remembered that Neby Samwil is one and a quarter miles from El Jib (Gibeon), a distance so great that it would lead us to expect the place to have its own distinctive name rather than one derived from Gibeon. We may also observe that Gilgal and Shiloh, where the tabernacle rested for many years, were not prominent places; the Temple at Jerusalem was on the lower hill of the two; and even the temples of Jeroboam, at Dan and Bethel, were not on prominent sites such as Neby Samwil and many other peaks in Palestine. It would almost seem as if these positions were selected as a sort of protest against the general custom of worship on the high places, and there is certainly no indication that prominence was an object in selecting a resting-place for the tabernacle.

C. W. Wilson.

NOTE ON THE SOUTERRAINS IN THE NOBLE SANCTUARY, JERUSALEM.

A CONSTANT feature of the rock-cut tanks of Palestine is the rock-cut staircase running round the walls from top to bottom; the small bottle-shaped tanks of twelve to fifteen feet diameter being an exception to the general rule.

These staircases may be seen in the tanks at Beit Jebrîn, Deir Dubban, Maresa, and at Nos. V., VIII., XI., and XXII. in the Noble Sanctuary.

We may therefore look for traces of these staircases in Souterrains Nos. I., III., and XXIX.; and not finding them, may we not fairly draw the inference—

1. That these souterrains are not tanks, but are ancient passages, which must have entrances and exits not now apparent?

2. That if they are tanks, either (*a*) the steps have been cut away; or (*b*) they still remain in the tanks blocked up with masonry?

As it is very improbable that rock-cut staircases would be cut away without any apparent object for so doing, we may, from the absence of these staircases, have much reason for supposing (whether they be tanks or no) that these souterrains are of greater extent than the plastered walls would at present indicate. It is very desirable that all information on the subject should be collected together, as the matter has an important bearing on the question of the site of the Temple. Lieut. Conder's recent researches cause renewed interest in the matter.

Jan. 4, 1875. CHARLES WARREN.

THE TEMPLE OF HEROD.

[This article and the following note on the tomb of David are reprinted from the *Athenæum* of Feb. 20th and Feb. 6th respectively, by kind permission of the proprietors.]

THE measurements of the Temple given in the Mischna are rendered with great precision, and are so perfectly intelligible that they have the appearance of having been taken on the spot or from a correct plan of the buildings. In the works of Josephus, on the other hand, however correct may be his descriptions, some of his measurements are given with a certain vagueness and want of method, rendering it very difficult to realise the form of the buildings he describes, and rather inducing the supposition that he spoke to some extent from recollection, and was often in want of memoranda or notes for the purpose of refreshing his memory.

For example, he tells us that the old cloisters of King Solomon (Ant. XX. ix. 7) were 400 cubits in length; that Herod, in rebuilding the Temple, encompassed a piece of ground twice as large (Bel. I. xxi. 1) as that before enclosed, and yet that the courts of Herod measured only a stadium or 600 feet a side (Ant. XV. xi. 3). It is not in these passages alone that Josephus appears to contradict himself, for, on the several occasions when he mentions the size of the Temple courts, there is an ambiguity presenting great difficulties.

I offer a solution to the problem by assuming that the 600 with regard to Herod's outer courts should be applied to cubits instead of feet; that Josephus's memory recalled the 600 feet, which is the measure (by my construction from the Talmud) of the length of the Inner Court, and ap-

plied it in error to the 600 cubits of the outer court. This solution will clear up the anomalies in Josephus's own text, and will allow it to agree with the Talmudic measurements.

From this standpoint let us reconstruct the outer courts of Herod, represented on the exterior by the east, west, and south walls of the present Noble Sanctuary, and by a line defining the exterior of north wall drawn parallel to northern edge of raised platform, 8 cubits north of the Golden Gate. These walls, measuring respectively 1,090, 1,138, 922, and 997 feet, give an average of 593 cubits, a very close approximation to the 600 cubits I have imputed to Josephus. If we now allow 8 cubits (Bel. VI. v. 1) for the wall all round, 30 cubits (Bel. V. v. 2) for width of cloisters on north, east, and west sides, and 105 feet (Ant. XV. xi. 5) for that of the Southern Cloister, we obtain an average length of 505 cubits for inner sides of these cloisters, the Talmudic measurement being 500 cubits, this again being a close approximation. We thus obtain coincidence between the external measurements of the Mischna and of Josephus. Within the area thus obtained let us re-construct the plan of Temple and courts according to the above authorities, and observe what buildings, souterrains, and cisterns now *in situ* can be identified with portions of the Temple of Herod.

The Golden Gate (the old foundations of which are still *in situ*) will now be found to form a continuation of the double wall of the Northern Cloisters to the east, just as the Arch of Robinson led from the Southern Cloisters to the west. The Golden Gate is thus that on which "was portrayed the city Shushan. Through it one could see the High Priest, who burnt the heifer, and his assistants going out to the Mount of Olives." There appear to have been steps on arches leading down from this gate into the Cedron towards the east, and leading up again past the southern end of present Garden of Gethsemane: even now (see Ordnance Survey $\cdot\frac{1}{10000}$) there are stone walls in the valley which perhaps may indicate the line of these steps; they appear to have ascended again to east, and, reaching the present road to Bethany, to have continued south-east on to a spot on level 2,460 feet just below some existing ruins shown on the Survey plan.

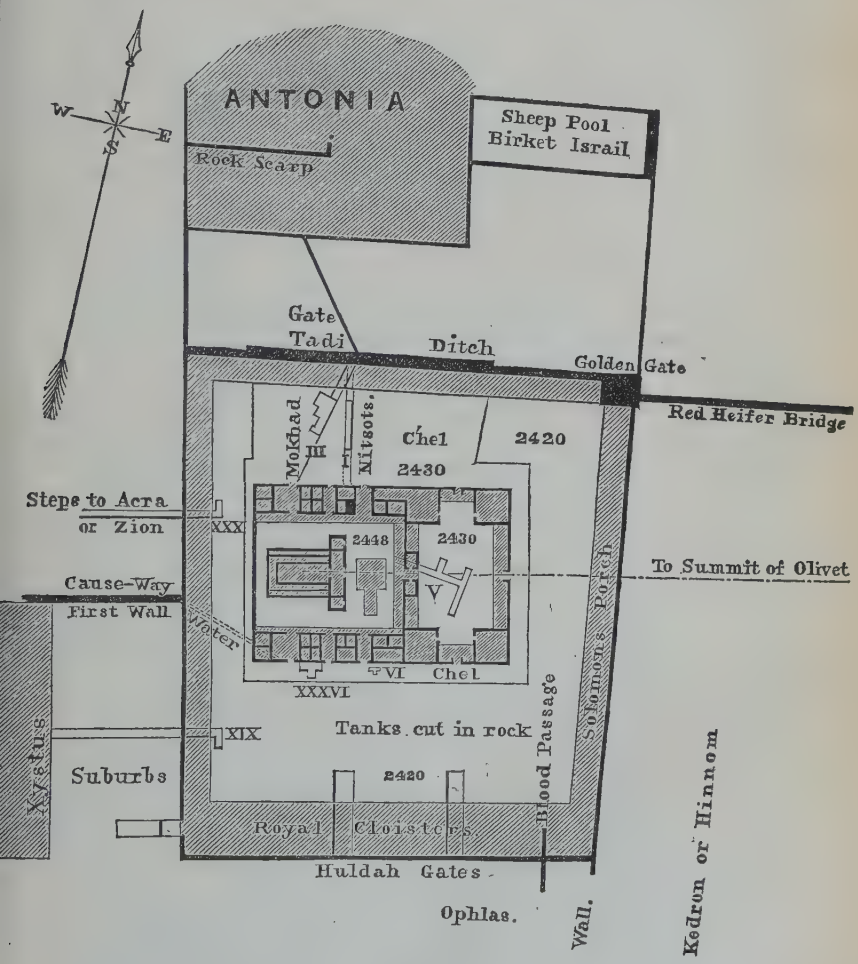
From this spot a view could have been obtained direct over the east wall, through the Gate Nicanor, over the altar into the Sanctuary. The production of this visual line to east passes through the centre of the present open court of the Ascension on summit of Olivet.

On this east wall, in which the Golden Gate is built, are, at the south-east angle, the Phœnician characters in red paint, establishing the great antiquity of this wall, and on which, until the destruction of Jerusalem, stood the Porch or Cloister erected by King Solomom (Ant. XX. ix. 7).

The Temple lies square to the west wall of the outer court, its western end coincident with the western side of raised platform, and its southern side eleven feet south of southern end of said platform.

This position is governed in some measure by the following passages

in Josephus:—Ant. XV. xi. 5, Ant. XX. viii. 11, Bel. II. xvi, 3, where it is stated that King Agrippa built himself a dining-room (overlooking the Inner Courts of the Temple) in the palace of the Asamoneans, which was situated at the northern extremity of the Upper City overlooking the Xystus, where the Bridge (Wilson's Arch) joined the Temple to the



Xystus. It can be seen on plan that in order to see into the Inner Court it would be necessary to be in a line parallel to the side of the court, and thus the position can be fixed to within a few feet either from the northern or the southern portion of the Inner Court. Taking other

matters into consideration, it is apparent that it was the southern portion which King Agrippa built his dining-room to overlook.

The Altar, as suggested in "Recovery of Jerusalem," p. 207, stands over the western end of Souterrain No. V., a remarkable underground passage, which may well have served as a communication under the courts of the Temple in connection with the great water system necessary for keeping in order the Temple courts; whether it may have led from the altar to the Blood-passage, which appears to have been discovered at the south-east angle of Noble Sanctuary, or whether it connected the Gates Mokhad and Nitsots with the waterworks, or whether it was the underground communication to Gate Nicanor (Ant. XV. xi. 6), under which it runs, is not yet certain; possibly it may have served for all these purposes, but in either case it would have been a passage of some importance. There is a legend in Mejir ed Din that one of the ancient kings threw a roll from Olivet, which fell near the portion of raised platform where No. V. is situated: it is possible that this may have some reference to the concealment of the volume of the Sacred Law in this souterrain. The plan of Temple and Courts is constructed entirely from the Talmud; the chambers of the court can only be obtained from the descriptions in the absence of any measurements. The three gates to Inner Court, both on north and south, are placed at equal intervals from each other, and from the corners of the courts. The Gate Nitsots falls in such a manner that the Sakhra Cave entrance opens into it: this cave would appear to be continued through into Souterrain No. 1, forming a passage to the Gate Tadj. This may be the passage into the chil mentioned in the Talmud as leading from Nitsots, and, if in connection with No. V. Souterrain, it would have been also the occult leading from Antonia to the Gate Nicanor, made for King Herod (Ant. XV. xi. 6). Between this and the Gate Corban lies the rock over which the present dome is built. On this fall the chambers of the washers and of Parva. The drain discovered on the top of the rock may be the passage by which the refuse from the "inwards" was carried off.

The room Parva lies directly over the Sakhra Cave, and the notes in the Talmud (see "Prospect of the Temple," p. 377) are sufficiently curious, and appear to prove a complete identification. "Parvah is the name of a man who was a magician, and there are some of the wise men that say that he digged a vault underground till he could come to see what the high priest did on the day of expiation."

The gates, according to the Talmud ("Prospect," p. 326), were $46\frac{3}{4}$ cubits from centre to centre, and, if we produce the Souterrain No. III. upon the line of the Inner Court, we find it falls upon the Gate Mokhad. The position of this Souterrain and the chambers in it appear to coincide very closely to the chambers spoken of as leading from Mokhad. It passes obliquely towards where Souterrain No. I. is supposed to run out at the gate Tadi, on northern edge of raised platform. The Mischna tells us, "in the gallery that went under the chel he passed out through

Tadi." Again we read, "the priest gets out and goes along in the gallery that goeth under the Temple, and candles flare on every side, till he cometh to the bath-place;" and, again, "he goeth down a turning staircase that went under the Temple." Dr. Lightfoot says that it was some vault underground through which they passed from the north-west room of Mokhad, and thence to Gate Tadi. The position and shape of Souterrain No. III., with its chamber adjoining, appear to exactly fulfil the requirements of the case.

In the southern side of the Inner Court the chamber of the draw-well lies just north of Cistern No. VI., and not far from No. XXXVI., which two cisterns are in communication with the large tanks of the southern portion of the Noble Sanctuary, and with the water supply from Solomon's Pools and Wady Biyar. Dr. Lightfoot (p. 351) supposes the house of Abtinas to have been over the chamber of the draw-well, and the Mischna tells us that the priests guarded the Sanctuary in three places: in house of Abtinas, in the house Nitsots, and in the house Mokhad.

We thus find the priests guarding the Inner Court at the three points where there were subterranean communications with the exterior.

The Huldah Gates are represented by the double and triple gates on south side, the latter of which was also formerly a double gate, its old foundations being still visible.

The western gates are still *in situ*, that leading from Souterrain No. XXX., south of Bab al Mathera, is the gate (Ant. XV. xi. 5) leading to the other city, or Acra, by a great number of steps down into the valley, and thence up again by the ascent. This may be the Gate *Kipunus* spoken of in the Mischna, the meaning of which word is "hole" or "through passage" ("Prospect," p. 226), giving a correct description of this vaulted descent.

South of this is the bridge or causeway leading over the valley north of the Xystus to the Upper City, along the first wall, at Bab as Silsile. This causeway is still *in situ*, except at Wilson's Arch, where a more modern construction has replaced the ancient bridge.

Further south are the two suburban gates (Ant. XV. xi. 5) at Bab al Magharibe and Robinson's Arch.

In the absence of further information, the shape and position of the Castle Antonia must remain highly conjectural; probably it stood on site of the modern Military Serai, connected with the Outer Court of Temple by two passages or cloisters.

The plan now put forward is thus shown to suit the features of the ground in a remarkable degree, and to coincide with existing ancient remains.

Throughout this article the cubit is assumed to be 21 inches.

C. WARREN.

THE TOMB OF DAVID.

January 27th, 1875.

We learn (Josephus, Bel. V., iii. 2) that Titus, when besieging Jerusalem, wished to pitch his camp nearer the city, and for this purpose made all the place level from Scopus to Herod's Monument.

Again we read (Bel. V., vii. 3) that Titus, on getting within the city, took up his position at the place called "The Camp of the Assyrians," and that Herod's Monument (Bel. V., xiii. 3) was near to the camp on north-east of Jerusalem.

We know (from Ant. XV., ix. 4; Bel. I., xxxiii. 2, and other passages) that Herod was buried in the fortress Herodium, which he had built for himself, eight miles south of Jerusalem, and we have no account of any of Herod's family having been buried at Jerusalem.

Whence then arises the term "Herod's Monument" (μνημεῖον), applied to the erection on north-east of Jerusalem?

The answer appears to be supplied by Ant. XVI. vii. 1, where it is related that Herod, having met with some strange obstacles in his attempt to plunder David's Tomb, built a propitiatory monument (μνῆμα) in white stone at the mouth of the Sepulchre.

From this it follows that the entrance to David's sepulchre was situate outside the north wall of Jerusalem to the east.

On turning to the account of the city wall (Bel. V., iv. 2), we read that the north wall, after passing by the royal caverns (translated by Whiston, "sepulchral cavern of the kings"), bent again at the tower of the corner.

The propitiatory monument would thus have stood near the royal caverns, which may have contained the sepulchres of the kings.

If we now examine the ground itself, regarding the present north wall as on the site of the old outer wall, we find the extensive caverns, or subterranean quarries, called the Cotton Grotto, to be situated on the spot where we would expect to find the royal caverns.

These quarries were apparently used in getting out the stone for the ancient buildings of Jerusalem, and it has been surmised (by Major Wilson, I think) that the blocks were brought down on an incline to the Temple platform through an opening to the south now lost to view.

May we suppose that David, having hewn the stones from these quarries ready for the building of the Temple, took advantage of the subterranean recesses thus afforded for the formation of his sepulchre?

Portions of the roof of these quarries have fallen in, which may prevent effectual search, but it is possible that further examination may result in the discovery of the continuation of the cavern to the south, and advance us a further step in our knowledge of the Holy City.

Major Wilson (p. 50, Vol. II., "Palestine Exploration Fund," 1872) proposes to identify the aqueduct which runs over the Cotton Grotto to Convent of Sisters of Sion, with the conduit of the upper pool in the

highway of the fuller, by which Rabshakeh stood when he addressed the Jews on the walls of the city (2 Kings xvii. 17). In this he appears to be borne out by the account of Josephus, who places (Bel. V., iv. 2) the royal caverns (Cotton Grotto) near the Fuller's Monument. Major Wilson also suggests that this conduit was cut across near the grotto in the time of Herod, and this appears to strengthen my proposal as regards the Tomb of David, and accounts for its entrance being found on *north* side of the city.

I suppose that on first cutting into the quarries of the Royal Cavern the entrance was to the south, opposite the Temple, the entrance to the royal tombs also being in same place, that this continued until after time of Nehemiah (Neh. iii. 16). On the re-building of the Temple by Herod, the ditch was cut to north of present wall, exposing to view the northern end of the cavern; and this new entrance being well outside the city was used in preference to the old southern entrance, which may possibly have been filled in for defensive reasons. The conduit of the upper pool (2 Kings xvii. 17) is so often supposed by the best authorities to be identical with the upper water-course of Gihon (2 Chron. xx. 30) that I should mention that I consider them to be quite distinct; the former entering the city (as suggested by Major Wilson) over the Cotton Grotto, the latter entering at the Tower of Hippicus (Bel. V., vii. 3), near the present Jaffa Gate, and running straight down to the west side of the City of David (2 Chron. xxii. 30) into the pool of the Bath, otherwise called Hezekiah's Pool, which I suppose to be Gihon in the Valley (2 Chron. xxxiii. 14).

CHARLES WARREN.

GREEK INSCRIPTION.

IN the *Quarterly Statement* received this morning I observe, at page 19, an imperfect inscription, of which Lieutenant Conder remarks it "seems to have been only a text or religious sentence." No doubt many others will find no difficulty in completing the text, but in case it should not have been so obvious as it seems to me, I beg to send you the solution.

E. B. FINLAY.

Folkestone, January 16, 1875.

Psalm cxviii. 20 (Septuagint, Psalm cxvii.).—*Αὕτη ἡ πύλη τοῦ κυρίου δίκαιοι εἰσελεύσονται ἐν αὐτῇ.*

ΑΥΤΗΗΠ(Υ)
(Λ)ΗΤΟΥΚΥ(Ρ)
ΙΟΥΔΙΚΑΙΟ
ΙΕΙϹ(Ε)ΛΕΥϹ(ΟΝΤ)
ΑΙΕΝΑΥ(ΤΗΙ)

INSCRIPTION AT EL GEBAL.

M. DE VOGÜÉ, French Ambassador at Constantinople, has recently made a communication to the Académie des Inscriptions et Belles Lettres, of which he is himself a member, on a Phœnician inscription found at Byblos, the Biblical Gebal. It contains fifteen lines, the sixth and the seventh of which are much damaged on the right-hand side, and many letters in other parts of the inscription are scarcely to be recognised. We are informed by M. J. Dérenbourg that the bas-relief represents the goddess Baaltis, in the shape and with the emblems of the Egyptian Isis, the king Yehumelekh in a Persian costume facing her, and offering her a cup which he holds in his hand. Since we know that the kings of Gebal are represented in Greek costume on other bas-reliefs, we may date the present inscription from the Persian time. As far as we are informed, the inscription does not contain historical facts, but important contributions to Phœnician grammar and lexicography, which we shall enumerate, partly according to the kind communication of M. Dérenbourg. 1. The pronoun זא and זן in the inscription, such being a composition of the Hebrew ז of זה and the Aramaic א and ן of רא and רן. 2. The ו occurring for the first time in Phœnician inscriptions as the possessive pronoun of the third person. 3. חוה, "to live," for חיה, root which we find in the name of Hava (Eve), and probably in the *avo* in the *Poenulus* of Plautus. 4. The root חרץ, in the sense of carving, and בזכן with the meaning of "grandson."—*Academy*, Feb. 5, 1875.